

THE REPORT
OF THE
PRESIDENT
OF
QUEEN'S COLLEGE, BELFAST,
FOR
THE YEAR ENDING 31st JULY, 1873.

Presented to both Houses of Parliament by Command of Her Majesty.



DUBLIN:
PRINTED BY ALEXANDER THOM, 87 & 88, ABBEY-STREET,
FOR HER MAJESTY'S STATIONERY OFFICE.
1874.

[C.—1003.] Price 7½d.

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THE REPORT
OF THE
PRESIDENT OF QUEEN'S COLLEGE, BELFAST,
FOR
THE SESSION ENDING 31st JULY, 1873.

TO THE QUEEN'S MOST EXCELLENT MAJESTY.

MAY IT PLEASE YOUR MAJESTY,—

In accordance with the Charter and the Statutes of this College, I have the honour of presenting to Your Majesty this my annual Report of its condition for the year ending the 31st of July, 1873, embracing the three terms which make up the Session. The Report of the Session now running will present a very considerable increase in numbers over the returns I now make for the past year, but as the third term has not yet ended, I do not now include the result of the Session '73-'74. During the year, ending July, 1873, there were in constant attendance at lectures and examinations 351 Students in the departments of Arts, Medicine, Law, and Engineering, of whom 328 were matriculated and 23 non-matriculated. The first term of that Session commenced as usual in October, when the prescribed examinations for matriculation and scholarships were held, in accordance with the notices in the Calendar; and after this the different courses of lectures, of study and class examinations were vigorously prosecuted in the several departments.

It affords me much gratification to record my entire approval of the general conduct and diligence of the great body of the students, the most of whom had been previously trained to strict habits of industry and perseverance in the excellent schools where they had acquired their preliminary education. In every college, some idlers will unfortunately always be found, but the great majority of the Belfast students are undoubtedly inspired with an ardent desire to acquire knowledge, not only for its own sake, but as constituting the necessary foundation for their future promotion and usefulness in life. Admitting also, a few exceptional cases, perhaps as few as exist elsewhere, the moral conduct of the mass of the students has been exemplary and becoming. In the

Session embraced in this Report, it was not necessary for the Council to investigate a single case of violation of collegiate discipline. My own advice and remonstrance were used with advantage in the few instances that required their intervention. Many examples of the laudable exertions of young men to overcome difficulties and to prepare themselves for collegiate and professional distinction, have been in this, as in previous sessions, reported to me, such as deserve the highest commendation.

The introduction in this part of my Report of an outline of the systematic courses pursued in this College in its various departments may convey some idea, not alone of their nature, but of the extent of the whole range of study and investigation required by the able and distinguished Professors to be pursued by the Students in their respective classes. A perusal of the subjoined sketch will make it obvious that the founders of the Queen's Colleges adopted a system of instruction which keeps steadily in view, in all our collegiate and university arrangements, the true idea of sound education, viz. :—the culture and discipline of the mind in mastering and understanding everything valuable and elevating in ancient and modern literature, and in the fundamental principles also, together with the experiments and inductions of modern science and philosophy. It will be inferred from the outline here subjoined, as well as from the digest of courses and subjects given in the Appendix, that teaching and experiments, and the constant examination of the Students, with their close attendance on Lectures, are indispensable requirements, from the time of matriculation to the period of graduation. Preparation for mere examining Boards may be obtained by systems of cramming, constructed by persons of poor ability and slender reputation, from the works and labours of superior men, but in the end they are found to be superficial, injurious to the cause of science, and to the permanent advancement of the youths, who prefer pure grinding to the processes of mental training and patient investigation required, by our universities. The abuses arising from the substitution of what is flimsy and of temporary utility, for what is solid, substantial, and lasting, are becoming so manifest that some remedy must speedily be applied. I invite attention to a synopsis of the courses laid down by the Council, and rigidly pursued by the Students of this College, and in doing so I express my decided conviction that the success of the young men of this College, who have not only highly distinguished themselves at examinations in the different departments of the Civil Service, but by their subsequent promotion (in many instances very remarkable), must be ascribed to the excellence of our curricula, as foundations of knowledge and of individual and public advantage, both being the natural results.

I. FACULTY OF ARTS.

Students intending to proceed to the degree of B.A. must pass the matriculation examination before entering upon their college studies. This examination is prescribed by the College Council, and embraces the first and second books of Euclid, arithmetic, the elementary rules of Algebra and simple equations, translation from two Greek and two Latin authors, Latin prose composition, English grammar and composition, English history, and the outlines of ancient and modern geography. Candidates for literary and science scholarships of the first year are examined in more extensive courses of literature and science. In 1873 the subjects prescribed for these literary scholarships were, in Greek, four books of the *Iliad* of Homer, the *Ion* of Euripides, portions of the *Anabasis* of Xenophon, selections from Lucian, with an exercise in prose composition; and in Latin, the *Odes* of Horace, six books of the *Aeneid* of Virgil, and portions of Cicero and Livy, with Latin prose composition. Candidates had also to translate from Greek and Latin passages not contained in the prescribed books. They were also examined in English composition, Roman history, and the histories of England and France, from A.D. 1066 to A.D. 1509. The subjects prescribed for science scholarships of the first year embraced Euclid, books 1, 2, 3, 4, and 6, with the definitions of the fifth book, geometrical exercises, Algebra to the end of quadratic equations, including the binomial theorem, and the first principles of logarithms; and plane trigonometry.

In the first session of the undergraduate course in arts the students must attend lectures and examinations in mathematics, Greek, Latin, modern languages, and English. In certain classes it has been found difficult to carry on the work of instruction from some of the students being more advanced in knowledge than others; but this has been to some extent obviated by calling in the aid of the senior scholars. At the end of the session a general examination is held in each class, which must be passed by the student before he is permitted to enter upon the studies of the second year. The same remark applies to the other years of the undergraduate course.

As the scholarships awarded after matriculation are tenable for one year only, scholarship examinations are held at the beginning of the second year, which are open to all students who have completed the first year of the undergraduate course. These examinations embrace more extended courses of literature and science than those prescribed for the first year's scholarships. In the second session the student is required to attend a course of logic and another of natural philosophy, together with second courses of instruction on any two of the following subjects: Mathematics, Greek, Latin, and a Continental language.

Students intending to proceed to the degree of B.A. must present themselves in Dublin for the first university examination, unless prevented by illness or other unavoidable cause. The subjects of this examination prescribed for 1873 are: In Greek, Euripides—*Medea*; Xenophon—*Memorabilia*, book 1. In Latin, Horace—*Satires*; Cicero—*Ad Familiares* I, II, III., with prose composition in both languages. In modern languages, translation from two modern authors, either French, German, or Italian, with an exercise from English into the language selected. In mathematics, Euclid, books 1 to 4, book 6, and definitions of fifth book, arithmetic, algebra to the end of quadratic equations, together with the binomial theorem, geometrical and arithmetical progression, the nature and use of logarithms, and plane trigono-

metry to the end of the solution of triangles. In mathematical physics, mechanics, hydrostatics, optics, and elements of astronomy. Candidates for honors at the same examination are required to answer in formal logic as well as in the subjects of the pass course. They are afterwards examined in a more extended course of literature or science.

For the third session, the following subjects are prescribed: 1, English literature; 2, metaphysics, or history, or political economy; 3, chemistry; 4, zoology or botany. Students are at the same time not obliged to adhere strictly to this course, but are permitted to substitute for any one or two of the above subjects, honor courses on subjects taught in the undergraduate course. This permission is largely used, and honor courses are delivered by many of the professors.

At the end of the third year students are permitted to present themselves for the final degree examination at the Queen's University. The details of this examination will be found in the Queen's University Calendar for 1874, p. 4, and in the Belfast Queen's College Calendar for the same year, p. lxxvii. For the degree of Master of Arts any bachelor of arts of one year's standing may offer himself for examination.

MEDICAL DEPARTMENT.

The medical students of this College pass through a rigorous training before they can acquire the degree of M.D. from the Queen's University. In the matriculation examination a knowledge of Latin, Greek, History, Arithmetic, Algebra, two Books of Euclid, &c. is required, and it is not uncommon that several trials have to be made before a sufficient standard is attained.

Many of the subjects of the medical course serve also as means of mental training:—for instance, the attendance on lectures and examinations on the subjects of Modern Languages, Experimental Physics, Botany, Zoology, and Chemistry, and the University test of the knowledge acquired, are such as is generally admitted, it is desirable to add to the required study of Classics and Mathematics for Arts degrees.

Thus every medical undergraduate must submit to an efficient training in non-professional subjects. He is guided during his proper medical studies by the ordinary curriculum of study, but in addition he almost uniformly extends his study of many of these subjects, as a glance at the numbers attending the classes on different subjects will show. The fact that many of the Professors are also University examiners, enables them to secure much greater devotion to the subjects of study, and to exact a much more extensive knowledge of each than could possibly be required by examiners unacquainted with the character of the training through which each Candidate for a degree had passed.

The attendance at classes is recorded daily in roll-books which are regularly inspected by the College Council; explanation is required of every absence from a class, and the required certificates are withheld whenever the attendance has been so deficient as to have imperilled the acquisition of a knowledge of any subject of study. The University examinations are conducted, in the most practical and laborious manner in dissecting-rooms, hospitals, &c., and every security is thus given that none but well-qualified Candidates are presented for graduation.

ENGINEERING DEPARTMENT.

The regular or ordinary course for students of Civil Engineering in this College extends over three Sessions, and includes attendance on Mathematics, Experimental and Mathematical Physics, Chemistry; a course of Mineralogy, Geology, and Physical Geography, and Modern Lan-

guages, especially French, together with the various courses conducted by the Professor of Civil Engineering, which may be thus sketched out:—1. Geometrical Drawing, including the general principles of the accurate representation on flat surfaces of the forms and dimensions of solid objects, and including the art of perspective, together with practical drawing especially in relation to engineering and architectural subjects. 2. Surveying, Levelling, and Mensuration, including various operations of field work in measuring over the surface of land, and of office work in mapping, drawing, and calculating in connexion with such measurements. 3. A course of teaching planned so as to be suitable for the stage of advancement at which Students arrive in the third year of their collegiate attendance, and adapted to constitute an introduction to, or a scientific foundation for many of the chief subjects of study which are necessary or useful to the civil or mechanical engineer; to the architect, and to many other classes of artificers and practical men. Of these it may suffice to mention;—Strength and elasticity of materials and structures, bridges of various kinds, ornamental architecture, theory of hydraulics, and its application in practical water works, and subjects more particularly relating to mechanical engineering. The Students are engaged in practical work in the drawing class-room during their three entire sessions of attendance: most of them work very diligently there, and many attain to proficiency so as to be well prepared for doing good service in offices, and otherwise in engineering business at once on leaving College. Many of the engineering students too, in addition to carrying out their attendance on the lectures of the Professor of Chemistry, have been very assiduous in acquiring a knowledge of practical chemistry by working in the laboratory under his direction, where they learn the methods of analyzing ores and other minerals, and acquire practice in chemical manipulation.

DEPARTMENT OF ENGLISH LAW.

The Professor of English Law, in conducting his department, has constantly kept in view the object of the Select Committee of the House of Commons in recommending the foundation of Chairs in Law in connexion with the Queen's Colleges, which, as they stated in their Report on Legal Education, was not merely to prepare Candidates for the Bar, and for the profession of Attorney and Solicitor, but to raise the standard of legal attainments amongst local practitioners, and especially to provide opportunities of legal education to qualify persons intended to fill administrative situations not strictly legal—a policy which has been since followed up by the Legislature conferring privileges, by way of inducement, on Candidates for the profession of Attorney and Solicitor, who shall avail themselves of these Schools of Law.

The Lectures are made auxiliary to the contemporaneous studies directed, and are accompanied by interrogation, independent of the General Examination and that for Honors. Such books, cases, and decisions, and portions of treatises are pointed out for reading as are considered by the Professor most useful in elucidating a branch of learning which is scarcely furnished with books exclusively intended for instruction; and no efforts have been spared to point out the peculiarities of the law in Ireland, whether proceeding from statutes or inherent diversity of practice, or to direct attention to the recent changes which have been introduced into the course of procedure.

From the first opening of the College to the present time the successive classes have spontaneously applied themselves with assiduity and perseverance to the various subjects of legal instruction, and several Non-

Matriculated Students have from time to time availed themselves of the privilege afforded by the College Ordinances of attending detached Courses of the Lectures on selected subjects.

Under these circumstances, I am gratified at being able to give the assurance that the Faculty of Law has fully realized the objects of its founders, and that a further extension of its public benefits would ensue upon the adoption by Government of the suggestion made by the same Committee of the House of Commons that a preference should be given to candidates for situations in the Civil Service, not of a purely legal nature, who could produce testimonials of legal attainments from those institutions—a rule which would fully accord with the principle laid down in a recent report of another Committee in relation to the Civil Service.

DEPARTMENT OF POLITICAL ECONOMY.

The Professor of Jurisprudence and Political Economy (Mr. T. E. Cliffe Leslie) fills in reality two distinct and important Chairs, in the two distinct Faculties of Law and Arts. As Professor of Jurisprudence, he lectures, teaches, and examines in the general philosophy and history of law, in Roman Law, and in Constitutional and International Law. As Professor of Political Economy, he lectures, teaches, and examines Arts' Students in that great subject. His instruction in Jurisprudence has the twofold purpose and result of teaching legal philosophy and history, both as a branch of higher University Education, and as a preparation for the legal profession; and the duties of the Professor in this department, discharged as they are by Professor Leslie, would be sufficiently arduous if he had not also to fill the Chair of Political Economy, to which he devotes as much time and labour as though he had no other collegiate duties. The stipend and emoluments attached to this double Chair are altogether disproportionate to the abilities, attainments, and exertions it demands on the part of the Professor.

The necessary condition that the Matriculated Students of this College must pursue one of these courses as preparatory to graduation has greatly elevated the standard of education throughout this province and the country, so that I feel perfectly justified in reiterating an opinion formerly expressed by me, that the courses required, both in this College and by the Queen's University, are such as train and educate the mind, whilst storing it with sound and useful knowledge. The possession of valuable, well selected libraries, and of apparatus, and objects of illustration; the remarkable and constant successes the Students of this College have had in carrying high, often the highest places, in all the branches of the Civil Service; the fact that many of the alumni of the College are acting in academies, and privately as tutors and instructors of the rising generation; and, above all, the unflagging zeal and admirable prelections of the professorial staff; all these have contributed to place this College on the solid and broad foundation on which it rests.

This College, viewed as a member of the Queen's University in Ireland, continues to hold its proper place, whether in regard to the number of Students it sends forward to graduate, or in reference to the positions they yearly obtain in the intellectual struggles for honors and exhibitions, with the able and well-trained Students of Cork and Galway.

In reference to the Queen's University itself, I may remark that its influence on this and the other Queen's Colleges has been very powerful and beneficial. From the moment of his matriculation the Student has before his mind the requirements, the honors, and distinctions of the Queen's University. Stimulated by these, he presses onward till he obtains the objects of his ambition at his first and final examinations in Dublin. The calendar of the Queen's University affords abundant testimony to its rapidly increasing expansion, and the value attached to the degrees and honors which it confers on its graduates.

The four following tables will be found both satisfactory and comprehensive.

In making the Denominational Returns I have thought it right to classify the students of the various Churches as they have designated themselves in the forms filled up by them at entrance.

L.—NUMBERS AND RELIGIOUS PERSUASIONS OF STUDENTS attending Lectures in QUEEN'S COLLEGE, BELFAST, in each Session from its opening.

Sessions.	Matriculated.	Non-Matriculated.	Total.	Church of Ireland.	Roman Catholics.	Presbyterians.	Methodists.	Independents.	Yazars.	Total.
1849-50, . . .	80	105	185	33	5	145	4	1	7	195
1850-51, . . .	110	75	185	33	10	136	4	1	1	185
1851-52, . . .	120	69	189	40	14	129	5	-	1	189
1852-53, . . .	101	53	154	33	15	109	4	-	2	154
1853-54, . . .	114	54	168	36	14	107	6	-	5	168
1854-55, . . .	118	65	183	34	14	131	8	-	1	183
1855-56, . . .	119	74	193	33	19	131	5	2	3	193
1856-57, . . .	136	58	194	35	14	131	3	2	9	194
1857-58, . . .	153	54	207	31	14	154	4	1	3	207
1858-59, . . .	160	63	223	45	14	153	8	2	1	223
Average of first 10 years, }	122.1	67	189.1	35.3	15.3	131.7	4.6	0	3.3	189.1
1859-60, . . .	199	56	257	43	16	194	8	2	4	257
1860-61, . . .	239	73	312	57	22	216	7	-	10	312
1861-62, . . .	290	76	375	59	17	266	13	4	16	375
1862-63, . . .	335	58	393	61	24	275	11	3	14	393
1863-64, . . .	340	47	387	63	26	261	10	3	24	387
1864-65, . . .	356	49	405	58	22	295	9	1	30	405
1865-66, . . .	360	53	413	68	19	291	13	2	38	413
1866-67, . . .	357	39	397	57	19	225	13	1	67	397
1867-68, . . .	357	33	390	53	16	213	25	2	55	390
1868-69, . . .	328	39	368	51	15	230	26	2	54	368
Average of second 10 years, }	317.2	51	368.2	55.8	19.6	244.6	14.0	2.0	31.2	368.2
1869-70, . . .	328	25	353	57	18	214	19	3	42	353
1870-71, . . .	337	43	380	70	14	226	23	4	38	380
1871-72, . . .	325	38	353	80	17	208	12	1	45	353
1872-73, . . .	328	28	351	79	15	203	21	1	32	351

[TABLE

II.—NUMBERS and RELIGIOUS PERSUASIONS of STUDENTS who have entered QUEEN'S COLLEGE, BELFAST, in each year since its opening.

Sessions.	Matriculated.	Non-Matriculated.	Total.	Church of Ireland.	Roman Catholics.	Presbyterian.	Methodist.	Independent.	Various.	Total.
1849-50, . . .	90	105	195	33	5	145	4	1	7	195
1850-51, . . .	51	42	93	15	7	68	1	-	2	93
1851-52, . . .	42	40	82	25	7	47	2	-	1	82
1852-53, . . .	31	23	54	16	7	28	2	-	1	54
1853-54, . . .	39	23	62	14	5	38	3	-	4	62
1854-55, . . .	41	38	79	13	6	58	2	-	2	79
1855-56, . . .	33	29	62	17	5	38	2	2	-	62
1856-57, . . .	40	28	68	18	4	40	1	-	5	68
1857-58, . . .	43	28	71	8	6	55	2	-	-	71
1858-59, . . .	51	37	88	24	8	51	4	1	-	88
Entered first 10 years,	461	383	854	183	60	362	28	4	23	854
1859-60, . . .	66	24	90	14	6	64	4	-	2	90
1860-61, . . .	96	41	137	29	13	85	3	-	7	137
1861-62, . . .	114	38	152	27	5	101	6	3	10	152
1862-63, . . .	115	23	137	23	12	92	3	-	5	137
1863-64, . . .	109	18	127	25	5	86	3	-	7	127
1864-65, . . .	108	27	135	23	6	87	3	-	7	135
1865-66, . . .	88	30	118	17	7	83	5	-	6	118
1866-67, . . .	95	12	107	16	6	81	10	-	14	107
1867-68, . . .	90	23	112	20	5	63	1	1	22	112
1868-69, . . .	79	24	103	16	7	60	6	2	12	103
Entered in second 10 years,	980	268	1,248	269	72	792	46	7	92	1,248
Total in 20 years,	1,421	651	2,072	392	132	1,334	69	11	114	2,072
1869-70, . . .	83	13	96	23	8	64	4	1	8	96
1870-71, . . .	84	30	114	35	2	57	8	1	10	114
1871-72, . . .	78	25	103	28	6	50	5	1	13	103
1872-73, . . .	99	14	113	33	6	60	9	-	5	113
	1,763	735	2,500	612	134	1,575	95	14	150	2,500

III.—RETURN of the Number of Medical Students in attendance in each Session.

Session.	Matriculated.	Non-Matriculated.	Total.	Session.	Matriculated.	Non-Matriculated.	Total.
1849-50,	28	27	55	1861-62,	81	48	129
1850-51,	20	35	55	1862-63,	69	33	122
1851-52,	25	39	64	1863-64,	110	33	143
1852-53,	29	33	62	1864-65,	126	25	151
1853-54,	29	37	66	1865-66,	130	29	159
1854-55,	39	36	75	1866-67,	157	17	174
1855-56,	33	48	81	1867-68,	163	16	161
1856-57,	36	25	61	1868-69,	150	24	174
1857-58,	35	32	67	1869-70,	145	22	167
1858-59,	45	34	79	1870-71,	168	26	184
1859-60,	56	39	95	1871-72,	162	25	187
1860-61,	70	46	116	1872-73,	174	14	188

* Of the 735 who entered as non-matriculated Students, 162 afterwards passed a matriculation examination. The College Register contains 1,827 matriculated and 673 non-matriculated, in all 2,500 students.

IV.—Returns showing the Numbers of Students attending the Lectures of each Professor in each year since the opening of the College.

Professor of	1826-27	1827-28	1828-29	1829-30	1830-31	1831-32	1832-33	1833-34	1834-35	1835-36	1836-37	1837-38	1838-39	1839-40	1840-41	1841-42	1842-43	1843-44	1844-45	1845-46	1846-47	1847-48	1848-49	1849-50	1850-51	1851-52	1852-53	1853-54	1854-55	1855-56	1856-57	1857-58	1858-59	1859-60	1860-61	1861-62	1862-63	1863-64	1864-65	1865-66	1866-67	1867-68	1868-69	1869-70	1870-71	1871-72	1872-73	1873-74	1874-75	1875-76	1876-77	1877-78	1878-79	1879-80	1880-81	1881-82	1882-83	1883-84	1884-85	1885-86	1886-87	1887-88	1888-89	1889-90	1890-91	1891-92	1892-93	1893-94	1894-95	1895-96	1896-97	1897-98	1898-99	1899-00	1900-01	1901-02	1902-03	1903-04	1904-05	1905-06	1906-07	1907-08	1908-09	1909-10	1910-11	1911-12	1912-13	1913-14	1914-15	1915-16	1916-17	1917-18	1918-19	1919-20	1920-21	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34	1934-35	1935-36	1936-37	1937-38	1938-39	1939-40	1940-41	1941-42	1942-43	1943-44	1944-45	1945-46	1946-47	1947-48	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60	2060-61	2061-62	2062-63	2063-64	2064-65	2065-66	2066-67	2067-68	2068-69	2069-70	2070-71	2071-72	2072-73	2073-74	2074-75	2075-76	2076-77	2077-78	2078-79	2079-80	2080-81	2081-82	2082-83	2083-84	2084-85	2085-86	2086-87	2087-88	2088-89	2089-90	2090-91	2091-92	2092-93	2093-94	2094-95	2095-96	2096-97	2097-98	2098-99	2099-00	2100-01	2101-02	2102-03	2103-04	2104-05	2105-06	2106-07	2107-08	2108-09	2109-10	2110-11	2111-12	2112-13	2113-14	2114-15	2115-16	2116-17	2117-18	2118-19	2119-20	2120-21	2121-22	2122-23	2123-24	2124-25	2125-26	2126-27	2127-28	2128-29	2129-30	2130-31	2131-32	2132-33	2133-34	2134-35	2135-36	2136-37	2137-38	2138-39	2139-40	2140-41	2141-42	2142-43	2143-44	2144-45	2145-46	2146-47	2147-48	2148-49	2149-50	2150-51	2151-52	2152-53	2153-54	2154-55	2155-56	2156-57	2157-58	2158-59	2159-60	2160-61	2161-62	2162-63	2163-64	2164-65	2165-66	2166-67	2167-68	2168-69	2169-70	2170-71	2171-72	2172-73	2173-74	2174-75	2175-76	2176-77	2177-78	2178-79	2179-80	2180-81	2181-82	2182-83	2183-84	2184-85	2185-86	2186-87	2187-88	2188-89	2189-90	2190-91	2191-92	2192-93	2193-94	2194-95	2195-96	2196-97	2197-98	2198-99	2199-00	2200-01	2201-02	2202-03	2203-04	2204-05	2205-06	2206-07	2207-08	2208-09	2209-10	2210-11	2211-12	2212-13	2213-14	2214-15	2215-16	2216-17	2217-18	2218-19	2219-20	2220-21	2221-22	2222-23	2223-24	2224-25	2225-26	2226-27	2227-28	2228-29	2229-30	2230-31	2231-32	2232-33	2233-34	2234-35	2235-36	2236-37	2237-38	2238-39	2239-40	2240-41	2241-42	2242-43	2243-44	2244-45	2245-46	2246-47	2247-48	2248-49	2249-50	2250-51	2251-52	2252-53	2253-54	2254-55	2255-56	2256-57	2257-58	2258-59	2259-60	2260-61	2261-62	2262-63	2263-64	2264-65	2265-66	2266-67	2267-68	2268-69	2269-70	2270-71	2271-72	2272-73	2273-74	2274-75	2275-76	2276-77	2277-78	2278-79	2279-80	2280-81	2281-82	2282-83	2283-84	2284-85	2285-86	2286-87	2287-88	2288-89	2289-90	2290-91	2291-92	2292-93	2293-94	2294-95	2295-96	2296-97	2297-98	2298-99	2299-00	2300-01	2301-02	2302-03	2303-04	2304-05	2305-06	2306-07	2307-08	2308-09	2309-10	2310-11	2311-12	2312-13	2313-14	2314-15	2315-16	2316-17	2317-18	2318-19	2319-20	2320-21	2321-22	2322-23	2323-24	2324-25	2325-26	2326-27	2327-28	2328-29	2329-30	2330-31	2331-32	2332-33	2333-34	2334-35	2335-36	2336-37	2337-38	2338-39	2339-40	2340-41	2341-42	2342-43	2343-44	2344-45	2345-46	2346-47	2347-48	2348-49	2349-50	2350-51	2351-52	2352-53	2353-54	2354-55	2355-56	2356-57	2357-58	2358-59	2359-60	2360-61	2361-62	2362-63	2363-64	2364-65	2365-66	2366-67	2367-68	2368-69	2369-70	2370-71	2371-72	2372-73	2373-74	2374-75	2375-76	2376-77	2377-78	2378-79	2379-80	2380-81	2381-82	2382-83	2383-84	2384-85	2385-86	2386-87	2387-88	2388-89	2389-90	2390-91	2391-92	2392-93	2393-94	2394-95	2395-96	2396-97	2397-98	2398-99	2399-00	2400-01	2401-02	2402-03	2403-04	2404-05	2405-06	2406-07	2407-08	2408-09	2409-10	2410-11	2411-12	2412-13	2413-14	2414-15	2415-16	2416-17	2417-18	2418-19	2419-20	2420-21	2421-22	2422-23	2423-24	2424-25	2425-26	2426-27	2427-28	2428-29	2429-30	2430-31	2431-32	2432-33	2433-34	2434-35	2435-36	2436-37	2437-38	2438-39	2439-40	2440-41	2441-42	2442-43	2443-44	2444-45	2445-46	2446-47	2447-48	2448-49	2449-50	2450-51	2451-52	2452-53	2453-54	2454-55	2455-56	2456-57	2457-58	2458-59	2459-60	2460-61	2461-62	2462-63	2463-64	2464-65	2465-66	2466-67	2467-68	2468-69	2469-70	2470-71	2471-72	2472-73	2473-74	2474-75	2475-76	2476-77	2477-78	2478-79	2479-80	2480-81	2481-82	2482-83	2483-84	2484-85	2485-86	2486-87	2487-88	2488-89	2489-90	2490-91	2491-92	2492-93	2493-94	2494-95	2495-96	2496-97	2497-98	2498-99	2499-00	2500-01	2501-02	2502-03	2503-04	2504-05	2505-06	2506-07	2507-08	2508-09	2509-10	2510-11	2511-12	2512-13	2513-14	2514-15	2515-16	2516-17	2517-18	2518-19	2519-20	2520-21	2521-22	2522-23	2523-24	2524-25	2525-26	2526-27	2527-28	2528-29	2529-30	2530-31	2531-32	2532-33	2533-34	2534-35	2535-36	2536-37	2537-38	2538-39	2539-40	2540-41	2541-42	2542-43	2543-44	2544-45	2545-46	2546-47	2547-48	2548-49	2549-50	2550-51	2551-52	2552-53	2553-54	2554-55	2555-56	2556-57	2557-58	2558-59	2559-60	2560-61	2561-62	2562-63	2563-64	2564-65	2565-66	2566-67	2567-68	2568-69	2569-70	2570-71	2571-72	2572-73	2573-74	2574-75	2575-76	2576-77	2577-78	2578-79	2579-80	2580-81	2581-82	2582-83	2583-84	2584-85	2585-86	2586-87	2587-88	2588-89	2589-90	2590-91	2591-92	2592-93	2593-94	2594-95	2595-96	2596-97	2597-98	2598-99	2599-00	2600-01	2601-02	2602-03	2603-04	2604-05	2605-06	2606-07	2607-08	2608-09	2609-10	2610-11	2611-12	2612-13	2613-14	2614-15	2615-16	2616-17	2617-18	2618-19	2619-20	2620-21	2621-22	2622-23	2623-24	2624-25	2625-26	2626-27	2627-28	2628-29	2629-30	2630-31	2631-32	2632-33	2633-34	2634-35	2635-36	2636-37	2637-38	2638-39	2639-40	2640-41	2641-42	2642-43	2643-44	2644-45	2645-46	2646-47	2647-48	2648-49	2649-50	2650-51	2651-52	2652-53	2653-54	2654-55	2655-56	2656-57	2657-58	2658-59	2659-60	2660-61	2661-62	2662-63	2663-64	2664-65	2665-66	2666-67	2667-68	2668-69	2669-70	2670-71	2671-72	2672-73	2673-74	2674-75	2675-76	2676-77	2677-78	2678-79	2679-80	2680-81	2681-82	2682-83	2683-84	2684-85	2685-86	2686-87	2687-88	2688-89	2689-90	2690-91	2691-92	2692-93	2693-94	2694-95	2695-96	2696-97	2697-98	2698-99	2699-00	2700-01	2701-02	2702-03	2703-04	2704-05	2705-06	2706-07	2707-08	2708-09	2709-10	2710-11	2711-12	2712-13	2713-14	2714-15	2715-16	2716-17	2717-18	2718-19	2719-20	2720-21	2721-22	2722-23	2723-24	2724-25	2725-26	2726-27	2727-28	2728-29	2729-30	2730-31	2731-32	2732-33	2733-34	2734-35	2735-36	2736-37	2737-38	2738-39	2739-40	2740-41	2741-42	2742-43	2743-44	2744-45	2745-46	2746-47	2747-48	2748-49	2749-50	2750-51	2751-52	2752-53	2753-54	2754-55	2755-56	2756-57	2757-58	2758-59	2759-60	2760-61	2761-62	2762-63	2763-64	2764-65	2765-66	2766-67	2767-68	2768-69	2769-70	2770-71	2771-72	2772-73	2773-74	2774-75	2775-76	2776-77	2777-78	2778-79	2779-80	2780-81	2781-82	2782-83	2783-84	2784-85	2785-86	2786-87	2787-88	2788-89	2789-90	2790-91	2791-92	2792-93	2793-94	2794-95	2795-96	2796-97	2797-98	2798-99	2799-00	2800-01	2801-02	2802-03	2803-04	2804-05	2805-06	2806-07	2807-08	2808-09	2809-10	2810-11	2811-12	2812-13	2813-14	2814-15	2815-16	2816-17	2817-18	2818-19	2819-20	2820-21	2821-22	2822-23	2823-24	2824-25	2825-26	2826-27	2827-28	2828-29	2829-30	2830-31	2831-32	2832-33	2833-34	2834-35	2835-36	2836-37	2837-38	2838-39	2839-40	2840-41	2841-42	284
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It becomes my duty to express to your Majesty once more, with feelings of the most respectful earnestness, my opinion regarding the present position of the Queen's Colleges in Ireland, as requiring from your Majesty's Government a full and immediate consideration of their claims to be placed on a foundation of permanent and more extended usefulness. I believe it has not escaped the attention of your Majesty's advisers, that the Colleges to be adapted to the purposes of spreading more widely the blessings of the high education, ought to possess increased endowments, in order to extend their libraries, to furnish more appropriately the laboratories of the physical, natural, and experimental sciences, and also the departments of the surgical and medical schools. Besides in various ways it operates injuriously to have the professors and officers of the Queen's Colleges left underpaid, and dissatisfied with their positions, struggling to maintain the rank which men of learning and gentlemen are expected to hold, and this at a period when the Government, taking into account the immensely increased scale of living, are properly raising the salaries of their public servants in almost every department of the State.

I feel much gratification in referring to a very valuable presentation lately made to the Library of this College by the Presbytery of Antrim and the Northern Presbytery of Antrim, on the terms set forth by the following letter of the Rev. John Scott Porter:—

16, College-square, E., Belfast,
5th April, 1873.

REVEREND AND DEAR SIR,—I have been instructed by a meeting which was held yesterday, consisting of the members of the Northern Presbytery of Antrim, and a deputation from the Presbytery of Antrim, to offer to the authorities of Queen's College, Belfast, the Library, which is the joint property of the above named two Presbyteries, subject to the following conditions, viz:—

1. The Library, together with any books that may be presented specially to it hereafter, is to be kept separate and distinct from the other books belonging to Queen's College; and

2. The present ministers of the above named two Presbyteries and their successors (being members of one or other of them) shall have the privilege of borrowing books from this particular collection, under such reasonable regulations as may be agreed upon by the College and the two Presbyteries, with a view to prevent or diminish the risk of loss. But the College is not to be accountable for books that may have been lent out in conformity with this stipulation.

It is expected that on receipt of the books, the College authorities will execute a declaration of trust, stating that the Library is held by them subject to the foregoing conditions.

In all other respects, this Library is to be available for the use and benefit of Queen's College, Belfast, in the same manner as the books which are its own property.

You will oblige me by bringing this matter before the consideration of the proper authorities of the College, and letting me know the result: and as notice has been given that the Library must be removed from its present situation, an early answer is desirable.

I have the honour to remain, Rev. and dear Sir,
Most respectfully yours, J. SCOTT PORTER,

To the Rev. Dr. Henry, Clerk of Northern Presbytery of Antrim.
President Queen's College, Belfast.

At a meeting of the Council of the College, held on the 9th April, 1873, it was resolved—

That the Rev. J. Scott Porter be informed that the President and Council feel much gratified by the offer to the College of the Library which is the joint property of the members of the Presbytery of Antrim and of the Northern Presbytery of Antrim, and that they accept the offer thankfully, on the terms named in the above named letter.

Resolved—That the President and Vice-President be requested to act as a committee to confer with Mr. Porter on the necessary arrangements.

A statement of the final arrangements in this matter between the two Presbyteries and this College will be found in the Appendix of this Report, page 119.

The books have accordingly been received by the College, and are now deposited in the Library.

If an illustration were required of the advantage and practicability of the full recognition of the principle of united education, this College, like its sister Colleges of Cork and Galway, incontestably furnishes it. Its authorities, its professors, its officers, its students, belong to different churches and creeds; and now, after twenty-five years' experience as President, I have known only the best results—those of cordiality and friendship—to accrue, for the public and social good, from this union of varied sentiment and opinion, whilst every member of the College claims and concedes alike the perfect exercise of conviction, in matters of public, individual and denominational concern.

In accordance with the provisions of the statutes of the College the sum of £1,400 was allocated at the beginning of the session to scholarships in the various departments, and £100 at the close of the session for prizes at the class examinations.

The exhibitions founded by private munificence were also awarded to the most deserving competitors, in accordance with the conditions prescribed by the donors.

Through the munificence and public spirit of the late Mr. William Dunville two valuable studentships were recently founded a short time before his lamented death, in this College, each tenable for two years, and of the value of £45 for the first year, and £100 for the second year. The calendar of the Colleges gives all necessary information regarding the eligibility of candidates for these studentships, with the times and subjects of examination.

In the commencement of the Session the Registrar furnished each of the Four Deans of Residences with a list of the names and residences of the students of his religious persuasion.

As from my long experience, this Report may possibly obtain some notice on the part of the friends of sound and liberal education in Parliament and in the country, I wind it up by first tendering my respectful advice to all teachers and parents of students; and, secondly, in recording, on the broadest grounds of public utility in a mixed community, my abiding and undiminished testimony in favour of united secular and separate religious instruction.

1st. I am aware of the pressure of parents and teachers to force on the early education of their sons; but it is most desirable that all

tutors and heads of schools should endeavour to induce fathers to grant more time for maturity, especially in the preliminary common branches, before the youths are forced to try their issue in collegiate conflicts. What are called the common branches are, very often, uncommon ones; and, when a student is deficient in the knowledge of English, history, arithmetic, geography, and of some power of composition, need I say that brought to encounter science and literature, as they must now be taught, he is left to battle afresh with the elementary means, when these should be at his easy disposal, both for the understanding and the recording of knowledge. Competitive examinations may apply to the few who enter into them, for places under the civil service, through the governmental rules; but the spirit of competition has entered more largely than ever into every profession and walk of life; and that parent does great injustice to his son, and mars his ultimate prospects, who hurries him, prematurely, from school to college, and from college to his calling, in the one case, unprepared for studies, which leave on the judgment or memory, no discriminating or abiding principles, and, in the other, little special qualification for distinction or ultimate success. In many cases, an additional year, devoted to the laying of scholastic foundations, would ensure greater collegiate advantage, and, in the end, higher personal gain.

Regarding united education I trust the time will never come when science shall cease to congregate within the peaceful walls of our Colleges, presidents, vice-presidents, professors, and students of various creeds and denominations, each, without the slightest compromise of religious faith, or principle, conceding to others what he claims in this regard for himself, all taught to respect one another as men and as citizens of the same state, uniting zealously for the common advantage, and learning those lessons of courtesy and good-will, which lay a solid basis for future co-operation, in the varied walks of public, professional, and social life. This firm maintenance of the right of individual faith, and this spirit of harmonious action, exercised in the promotion both of personal and public benefit, are equally consonant with the genius of the State, which has committed to this College its high and beneficent mission, and it is right that all its authorities should preserve inviolate the fundamental principles of its foundation.

I draw attention to the ample returns I have furnished in the Appendix respecting the state and condition of the College, with the amount of expenditure, fees received and paid; to each professor, together with an enlarged digest of the various subjects of lectures, and the papers used at the different examinations for pass, for honors, and scholarships.

All of which is testified on behalf of the College by your Majesty's most dutiful servant,

P. SHULDHAM HENRY.

Queen's College, Belfast,
20th May, 1874.

APPENDIX.

APPENDIX, No. 1.

Appendix,
No. 1.

QUEEN'S COLLEGE, BELFAST, and QUEEN'S UNIVERSITY.

Queen's
College,
Belfast, and
Queen's
University.

THE COLLEGE is a Corporation under the name and style of "QUEEN'S COLLEGE BELFAST." It was founded under the provisions of the Act 8 & 9 Victoria, cap. 66, intituled "An Act to enable Her Majesty to endow new Colleges for the Advancement of Learning in Ireland." Under the powers given by this Act, it was determined to found three Colleges. Belfast, Cork, and Galway, were selected as the sites of these Colleges, and on the 30th day of December, 1846, letters patent were issued, incorporating them. The Presidents and Vice-Presidents of the three Colleges were formed into a Board, called "The Board of Queen's Colleges," for the purpose of drawing up the statutes and arranging the system of education to be pursued in them.

On the 4th of August, 1849, the Professors were appointed, and the Colleges opened for the reception of students on the 30th October, in the same year.

Letters patent, constituting the statutes, were issued on the 11th of December, 1849, and a further charter was issued in the year 1863.

THE COUNCIL OF THE COLLEGE.

The President.

The Vice-President.

J. Cuming, M.D., Professor of Medicine.

W. Nesbitt, M.A., Professor of Latin.

James Thomson, LL.D., Professor of Civil Engineering.

C. MacDonall, LL.D., Professor of Greek.

P. Redfern, M.D., Professor of Anatomy.

J. Purser, M.A., Professor of Mathematics.

PROFESSORS.

The Greek Language, . . .	Charles MacDonall, LL.D., M.R.S.
The Latin Language, . . .	William Nesbitt, M.A.
History and English Literature, . . .	Charles Duke Yonge, B.A. Oxon. :
Modern Languages, . . .	A. L. Meissner, PH.D.
Mathematics, . . .	John Purser, M.A., M.R.I.A.
Natural Philosophy, . . .	Joseph David Everett, M.A., D.C.L.
Chemistry, . . .	Thomas Andrews, M.D., F.R.S., M.R.I.A.
Natural History, . . .	Robert O. Cunningham, M.D., F.L.S.
Logic and Metaphysics, . . .	John Park, M.A.
Civil Engineering, . . .	James Thomson, LL.D., C.E.
Agriculture, . . .	John F. Hodges, M.D., F.O.S.
Anatomy and Physiology, . . .	Peter Redfern, M.D. Lond., F.R.C.S.
Practice of Medicine, . . .	James Cuming, M.D.
Practice of Surgery, . . .	Alexander Gordon, M.D.
Materia Medica, . . .	James Seaton Reid, M.D.
Midwifery, . . .	R. F. Dill, M.D.
English Law, . . .	Echlin Molynaux, A.M.
Jurisprudence and Political Economy, . . .	T. E. Cliffe Leslie, LL.B.

Appendix,
No. 1.Queen's
College,
Belfast, and
Queen's
University.

OFFICE BEARERS.

Curator of Museum, . . .	The Professor of Min., Geo., and Nat. Hist.
Registrar, . . .	Rev. Richard Oulton, D.D.
Librarian, . . .	Rev. George Hill.
Bursar, . . .	Alexander Dickey, Esq.

DEANS OF RESIDENCES.

	Appointed.
Irish Association of Non-Subscribing Presbyterians, . . .	Rev. John Porter, . . . 1832
General Assembly of the Presbyterian Church in Ireland, . . .	Rev. Josias Leslie Porter, D.D., LL.D., 1866
Wesleyan Methodists, . . .	Rev. Robert Crook, LL.D., . . . 1871
Church of Ireland, . . .	Rev. Samuel E. Bushy, LL.D., . . . 1872

The Deans are designated as they wish themselves to be called.

The students of the College are either Matriculated or Non-matriculated. All the courses for Matriculated students in Arts, including the Department of Civil Engineering, and also in the Faculties of Medicine and of Law, will be found in the Calendar, which is published annually.

Non-matriculated students, on paying the regulated class fees, and signing an engagement to observe order and discipline in the College, are permitted, without undergoing a preliminary examination, to attend any separate course or courses of Lectures; but are not permitted to become candidates for Scholarships or Prizes, or to enjoy other privileges of the Matriculated students.

Students in any of the Faculties can be admitted *ad eandem* from the other Queen's Colleges, or from any University capable of granting degrees.

COLLEGIATE SCHOLARSHIPS.

In the FACULTY OF ARTS—30 Junior Scholarships, of £24 each, are awarded to Undergraduates—15 for proficiency in Literature, and 15 for proficiency in Science; also, 8 Senior Scholarships, of £40 each, to Graduates, one being limited to students who have also completed the course for the degree of LL.B.; and 5 Scholarships, of £20 each, to Engineering Students.

In the FACULTY OF MEDICINE—8 Junior Scholarships, of £25 each, are awarded.

In the FACULTY OF LAW—3 Junior Scholarships, of £20 each, are awarded.

SCHOLARSHIPS AWARDED IN THE SEVERAL FACULTIES, 1871-72.

- * Senior Scholarships awarded.
- 20 Junior Scholarships in Arts awarded.
- 3 Engineering Scholarships.
- 7 Medical Scholarships.
- 3 Law Scholarships.

1872-73.

- 6 Senior Scholarships awarded.
- 19 Junior Scholarships in Arts awarded.
- 3 Engineering Scholarships.
- 8 Medical Scholarships.
- 4 Law Scholarships.

By an order of Her Majesty in Council, of 21st May, 1855, applying to the Civil Service, it is ordained that "every person nominated to a junior situation should obtain a certificate of qualification before entering on his duties." The ordinary classes in Queen's College embrace the branches required in the Examinations for the Civil Service, and also in the Examination for students intending to become candidates for commissions in the Royal Artillery and Engineers, and for appointments to the Civil Service of India, both of which are now thrown open to public competition.

QUEEN'S UNIVERSITY IN IRELAND.

Appendix,
No. 1.

The charter founding the Queen's University in Ireland received the Royal sanction in the year 1850, and it provides that its Senate should have the power of conferring upon the students of the Queen's Colleges of Belfast, Cork, and Galway, such degrees and distinctions, in the Faculties of Arts, Law, and Physic, as are granted and conferred in other Colleges and Universities of Great Britain and Ireland. It further ordains that any of the students of the three Queen's Colleges, who shall have obtained such degrees in any of the several Faculties of Arts, Medicine, and Law, as shall be conferred by the Chancellor and Senate of the Queen's University, shall be fully possessed of all such rights, privileges, and immunities, as belong to similar degrees granted by other Universities or Colleges, and shall be entitled to whatever rank and precedence is derived from similar degrees granted by other Universities.

By the charter of the Queen's University, candidates for Degrees in Medicine are required to have attended at least two courses of Medical Lectures in some one of the Queen's Colleges. For the remainder of the courses of Medical Lectures, authenticated certificates will be received from the Professors or Lecturers in Universities, Colleges, or Schools, recognised by the Senate of the Queen's University in Ireland.

The Chancellor and Senate also have the power of admitting, by special grace, Graduates of other Universities to similar and equal degrees.

In order to obtain a degree or diploma in the Queen's University it is necessary to enter the College as a Matriculated Student, to pass the entrance or Matriculation Examination, and to pursue a fixed course of study.

The Matriculated Students may be classified as follow:—

I.	Those intending to proceed to the Degrees of A.B. and A.M.
II.	" " Degree of M.D.
III.	" " Diploma of Elementary Law.
IV.	" " Degrees of LL.B. and LL.D.
V.	" " Diploma of Civil Engineering.
VI.	" " Diploma of Surgery.

THE SENATE.

Chancellor.—The Most Honorable the Marquess of Kildare, M.A. (Oxon.)

Vice-Chancellor.—Sir Dominic J. Corrigan, Bart., M.D., M.P., Physician in Ordinary to the Queen in Ireland.

The Rev. P. Shuldham Henry, D.D., M.B.I.A., President Queen's College, Belfast.

Edward Berwick, B.A., President Queen's College, Galway.

Sir Richard Griffith, Bart., LL.D., M.B.I.A.

Major-General Sir Thomas Askew Larcom, B.E., E.C.B., LL.D., F.R.S., M.B.I.A., &c.

James Gibson, A.M., Q.C., M.B.I.A., Barrister-at-Law.

The Right Hon. James Henry Monahan, Lord Chief Justice of the Common Pleas.

Robert Adams, A.M., M.D., F.R.C.S.

The Right Honorable Sir Robert Peel, Bart., M.P.

The Right Reverend the Lord Bishop of Killaloe, D.D.

His Grace the Archbishop of Dublin, D.D.

The Lord Talbot de Malahide, F.R.S., M.B.I.A.

The Lord Clermont, D.L.

Right Honorable Lord Emily.

Right Honorable Lord O'Hagan.

William K. Sullivan, esq., F.R.D., President Queen's College, Cork.

David Ross, M.A., LL.B.

William MacCormac, M.A., M.D.

Thomas William Moffett, LL.D.

Peter Redfern, M.D.

Maxwell Simpson, M.D., F.R.S.

Sir Robert Kane, F.R.S., LL.D., &c.

Secretary.—G. Johnstone Stoney, M.A.—Office, Dublin Castle.

The Senate holds its sittings in Dublin Castle, where the examinations of the students of the three Colleges, for Graduation and University Exhibitions, are annually conducted by Examiners appointed by the Senate from year to year.

APPENDIX, No. 2—continued.

RETURN of the NUMBER of STUDENTS attending each CLASS in the Queen's College, Belfast, in each Year—continued.

CLASS.	SUSSEX.										
	1860, 1861.	1862, 1863.	1864, 1865.	1865, 1866.	1866, 1867.	1867, 1868.	1868, 1869.	1869, 1870.	1870, 1871.	1871, 1872.	1872, 1873.
Greek—1st year, ...	83	66	79	63	49	47	43	41	37	37	36
„ 2nd „	63	44	40	49	21	19	24	11	22	19	18
„ Higher, ...	7	9	12	8	4	5	6	7	6	6	7
Latin—1st year, ...	83	65	78	64	50	48	43	44	39	37	38
„ 2nd „	60	40	33	44	40	34	37	32	32	21	36
„ Higher, ...	6	8	7	4	6	7	9	11	6	7	8
The English Language, ...	85	70	80	67	49	46	43	43	37	36	37
History, ...	8	6	4	4	5	9	6	16	12	19	18
English Literature, ...	41	52	48	43	32	41	32	35	39	27	25
Modern Languages (French, Ger- man, Italian), ...	110	99	110	115	109	115	96	91	92	98	96
Senior „ „	43	36	36	36	46	53	32	52	37	30	36
The Celtic Languages, ...	The Lectures in each Session open to the Public.										
Mathematics—1st year, ...	102	85	92	75	62	58	66	57	44	50	46
„ 2nd „	15	20	17	19	12	22	24	22	17	10	9
„ Higher, ...	5	6	4	4	6	33	7	8	8	6	4
Nat. Philosophy—Higher Class, ...	—	—	5	4	—	9	5	7	3	4	4
„ Mathematical Physics, &c., ...	72	69	60	68	56	51	46	52	46	32	31
„ Experimental Physics, ...	94	95	87	120	104	90	84	78	86	90	78
Natural Philosophy applied, ...	2	5	6	7	4	6	10	5	3	5	3
Chemistry, ...	89	81	93	95	91	84	96	84	106	103	96
Practical Chemistry, ...	24	26	44	37	44	51	44	30	44	43	42
Laboratory, ...	15	8	14	16	16	16	17	16	16	17	16
Zoology, ...	66	90	82	84	92	83	75	51	75	75	73
Botany, ...	62	90	92	37	50	51	60	36	60	61	60
Physical Geography, ...	7	—	—	—	—	—	—	—	—	—	—
Logic, ...	66	37	49	08	52	43	46	38	40	20	32
Metaphysics, ...	34	40	40	41	39	29	33	30	20	14	18
Higher Logic, ...	12	25	14	24	33	22	21	15	15	9	7
Mineralogy and Geology, ...	10	12	14	15	5	11	6	10	5	8	10
Engineering, 1st year, ...	11	15	15	14	12	8	13	11	5	12	13
Engineering, 2nd year, { lectures, } 11 8 { 12 10 8 10 4 9 9 3 4	11	8	{ 12 10 8 10 4 9 9 3 4	{ 12 9 8 10 4 9 8 3 4	{ 7 7 6 9 5 3 8 6	{ 7 7 5 6 10 5 3 8 6	{ 7 7 5 6 10 5 3 8 6	{ 7 7 5 6 10 5 3 8 6	{ 7 7 5 6 10 5 3 8 6	{ 7 7 5 6 10 5 3 8 6	{ 7 7 5 6 10 5 3 8 6
Engineering, 3rd year, { lectures, } 3 7 { 7 7 5 6 10 5 3 8 6											
Theory of Agriculture, ...	6	—	—	—	—	—	—	—	—	—	—
Practice of Agriculture, ...	—	—	—	—	—	—	—	—	—	—	—
Diseases of Farm Animals, ...	—	—	—	—	—	—	—	—	—	—	—
Medical Jurisprudence, ...	16	25	30	28	35	33	35	34	41	37	38
Anatomy, ...	83	87	99	109	127	120	130	117	142	136	134
Practical Anatomy, ...	91	86	126	124	149	159	160	140	182	157	168
Practice of Medicine, ...	27	36	44	48	67	70	67	69	68	57	50
Practice of Surgery, ...	53	46	48	55	77	81	75	61	72	55	51
Materia Medica, ...	37	29	38	47	47	38	46	38	49	43	51
Midwifery, ...	22	34	19	23	36	37	48	41	45	46	39
Law of Property, ...	12	12	14	19	13	20	17	24	27	21	28
Equity and Bankruptcy, ...											
Common and Criminal Law, ...											
Evidence and Pleading, ...	18	17	20	16	16	8	10	14	12	9	6
Political Economy, Arts, ...	11	10	11	19	11	16	19	20	23	17	23
Civil Law; Constitutional, ...											
Colonial, and International Law; Jurisprudence, ...											
Arabic, ...	—	—	—	—	—	—	—	—	—	—	—
Hindustani, ...	3	—	—	—	—	—	—	—	—	—	—
Sanskrit, ...	5	4	4	—	—	—	—	—	—	—	—
Operative Surgery, ...	11	2	—	16	23	12	10	17	13	23	23

APPENDIX,

RETURN of the AMOUNT of FEES received by each

Professor of	1849-50.	1850-51.	1851-52.	1852-53.	1853-54.	1854-55.	1855-56.	1856-57.	1857-58.	1858-59.	1859-60.
	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.
Greek, ...	*80 10	85 0	50 0	27 5	38 5	46 5	51 15	44 15	51 0	70 0	†93 3
Latin, ...	*73 15	79 0	50 10	31 5	38 5	44 5	47 15	30 15	33 0	07 0	†30 0
English History and Literature, ...	50 5	50 5	47 10	31 5	48 5	45 5	50 5	43 15	57 10	09 0	94 15
Logic & Metaphysics, ...	6 0	-	55 3	34 5	37 15	41 0	41 15	48 5	45 15	68 10	80 0
Mathematics, ...	116 15	97 10	69 15	43 0	54 10	59 0	60 10	62 15	69 10	97 10	139 10
Natural Philosophy, ...	79 5	70 15	99 10	47 0	73 15	76 15	59 10	63 15	72 0	66 10	61 5
Chemistry, ...	35 5	104 0	117 5	91 10	111 10	131 15	103 10	133 0	113 10	147 5	184 0
Practical Chemistry, ...	143 0	170 0	195 15	230 10	222 0	250 0	256 0	101 0	206 0	262 10	307 0
Anatomy and Physiology, ...	20 10	69 0	70 15	60 15	55 0	76 15	59 10	56 0	52 10	105 5	94 10
Practical Anatomy, ...	97 0	04 0	68 0	50 0	61 0	85 0	74 0	06 0	96 0	120 0	159 10
Natural History and Botany, ...	-	7 10	24 15	17 15	20 15	16 0	12 10	37 0	30 5	21 15	24 15
Modern Languages, ...	26 0	21 0	35 15	10 15	20 0	14 10	29 5	22 10	31 15	28 10	36 10
Mineralogy and Geology, ...	32 0	29 0	37 0	23 0	20 0	16 0	21 0	27 0	21 0	25 0	38 0
Jurisprudence and Political Economy, ...	16 0	24 10	22 0	14 0	17 15	21 0	13 10	27 0	23 0	22 15	24 15
English Law, ...	15 10	41 0	49 5	22 0	46 0	32 15	28 0	25 10	40 5	31 5	47 0
Civil Engineering, ...	17 0	31 0	32 0	18 0	30 0	30 0	56 0	43 10	26 0	37 0	44 0
Agriculture and Medical Jurisprudence, ...	41 0	21 10	36 0	51 0	43 0	43 0	74 0	42 10	34 0	46 0	65 10
Practice of Medicine, ...	22 0	28 0	26 0	29 0	53 0	43 0	45 0	20 0	34 0	39 0	50 0
Surgery, ...	28 0	10 0	22 0	27 0	31 0	33 0	44 0	24 0	13 0	26 0	25 0
Materia Medica, ...	-	-	-	-	-	-	-	32 0	25 0	26 0	22 0
Midwifery, ...	-	-	-	-	-	-	-	-	-	-	-
Teacher of Drawing, ...	-	-	-	-	-	-	-	-	-	-	-

* In the Session of 1849-50, Medical Students were required to attend the Greek and Latin Classes, but have since been exempt from attending either class.

† Besides for Sanskrit and Hindustani, 1859-60, £35; 1860-61, £22 10s.; 1861-62, £23; 1862-63, £32 10s.; 1863-64, £20; 1864-5, £20.

Queen's College, Belfast, March, 1873.

Appendix,
No. 4.

APPENDIX,

Expendi-
ture of One
Year's
Additional
Grant.

ACCOUNT of the EXPENDITURE of ONE YEAR'S ADDITIONAL GRANT

1. Library of Ancient and Modern Literature and Philology:

Ancient Classical Languages and Philology, ...	£ s. d.
English History and Literature, ...	20 5 9
Foreign Modern Languages, ...	21 4 11
Works of General Interest, &c., ...	15 0 9
	105 10 10
	162 2 3

2. Libraries, Museum, &c., Mathematical, Physical, and Chemical Sciences:

Mathematical and Physical Libraries, ...	14 3 8
Chemical Library, ...	15 10 6
Museum and Cabinet of Physical Science, ...	26 0 8
Laboratory, Chemical Science, ...	43 10 1
	124 9 6

No. 3.

Professor in the Queen's College, Belfast, in each Year.

1860-61.	1861-62.	1862-63.	1863-64.	1864-65.	1865-66.	1866-67.	1867-68.	1868-69.	1869-70.	1870-71.	1871-72.	1872-73.
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
131 15	186 0	187 15	221 0	233 10	212 0	131 0	131 0	127 0	109 0	114 0	103 0	104 0
127 15	185 0	166 10	211 0	220 10	202 0	167 0	152 0	165 0	154 0	132 0	109 0	119 0
117 5	155 10	164 5	163 10	162 10	131 10	143 10	130 10	107 10	121 0	128 0	162 0	96 0
58 10	106 5	134 10	173 10	143 0	183 10	184 10	140 10	139 10	117 0	98 10	70 0	71 10
136 0	163 5	211 5	261 0	200 0	173 0	143 0	135 0	132 0	148 0	117 0	108 0	107 0
100 10	173 15	194 10	183 0	106 0	208 0	190 0	192 0	183 0	177 0	164 0	107 0	164 0
167 0	195 15	210 5	213 10	294 10	252 0	277 10	299 0	284 10	249 10	276 0	324 0	300 10
427 10	432 10	423 10	433 10	567 10	544 0	643 14	652 0	731 18	582 1	697 17	706 10	749 12
70 0	96 10	120 5	157 0	170 0	144 0	154 0	165 0	133 0	104 0	142 0	128 4	136 0
277 0	319 5	270 15	231 0	278 0	247 0	268 0	280 0	245 0	255 0	226 0	244 0	240 0
11 10	16 5	20 10	22 0	25 0	24 0	9 0	20 0	7 0	16 0	20 0	12 0	19 0
28 10	23 15	37 10	38 0	51 0	51 0	46 0	37 0	40 0	56 0	65 0	39 0	54 0
20 0	23 0	21 0	18 0	30 0	25 0	23 0	35 0	31 0	43 0	56 0	34 0	48 0
32 0	40 15	70 0	82 0	97 0	79 0	08 0	70 0	78 0	66 0	51 0	60 0	48 0
43 0	**44 0	**36 15	48 0	55 0	40 0	67 0	63 0	68 0	61 0	73 0	67 0	77 0
37 0	64 10	46 0	59 0	74 0	77 0	103 0	103 0	92 0	96 0	103 0	94 0	87 0
79 13	84 12	96 11	75 0	82 0	94 0	137 0	144 0	131 0	115 0	134 0	113 0	127 0
60 0	69 0	70 0	59 0	73 0	83 0	86 0	71 0	89 0	73 0	77 0	04 0	98 0
40 0	63 0	36 0	66 0	36 0	42 0	64 0	72 0	93 0	70 0	79 0	94 0	74 0
-	-	-	-	-	-	-	-	-	-	-	-	-

† Besides for Arabic in 1869-70, £3.

‡ Professor McCosh was appointed in Session 1861-62, and taught and received fees from Students properly belonging to the previous Session.

§ The Professor of Anatomy pays to his Demonstrator a portion of the fees for Practical Anatomy.

** No endowment for Medical Jurisprudence. Professor Hedges delivers the lectures, receiving only class fees.

JOHN WYLIE, *Bursar*.

No. 4.

Appendix,
No. 4.

to the Queen's College, Belfast, ending 31st March, 1872.

Expendi-
ture of One
Year's
Additional
Grant.3. Libraries, Museum, and Collection of Objects of the Department
of the Natural Sciences:

Library of Natural History, and Geology and Mineralogy,	£ s. d.
Museum of Natural History, and Geology and Mineralogy,	20 15 1
	39 17 0
	60 12 1

4. Libraries, Museums, and Collections of Objects of the Department
of Engineering:

Library of Engineering,	£ s. d.
Instruments and Collections of Engineering,	11 14 0
	27 6 10
	39 0 10

Appendix,
No. 4.

APPENDIX, No. 4—continued.

Expendi-
ture of One
Year's
Additional
Grant.ACCOUNT of the EXPENDITURE of ONE YEAR'S ADDITIONAL GRANT
to the Queen's College, Belfast, ending 31st March, 1872—
continued.

5. Museum and Library of Medical Science:		£	s.	d.
Library of Medical Works,	.	36	2	2
Anatomical and Pathological Museums, &c.,	.	77	6	8
Surgical Museum,	.	6	5	0
Medical Jurisprudence,	.	20	16	3
Midwifery,	.	—	—	—
Prac. of Medicine,	.	—	—	—
		140	10	1
6. Library of Metaphysical, Legal, and Economical Science:				
Law, Jurisprudence, and Political Economy,	.	35	12	9
Metaphysics,	.	18	10	11
		54	3	8
7. Printing, Stationery, Advertising, Postages, Office Expenses, &c.,		298	16	6
8. Heating and Lighting,		158	16	3
9. Grounds,		84	8	2
Balance in Bank of Ireland Office, 31st March, 1872,		362	19	1
Total,		1,485	18	5.
Amount of One Year's additional Grant,		1,000	0	0
College and Matriculation Fees,		114	0	0
Balance in Bank, 31st March, 1871,		371	18	5
Total,		1,485	18	5

The Accounts of the College up to 31st March, 1872, have been examined and found correct by the Commissioners for Auditing the Public Accounts.

May, 1874.

JOHN WYLLIE, *Bursar.*

APPENDIX, No. 5.

GENERAL CLASS EXAMINATIONS, QUEEN'S COLLEGE, BELFEST.

	Examinations 1871-72.			A.M.	E.M.	Examinations 1872-73.			A.M.	E.M.
The English Language, ...	Saturday, ...	January 4	—	12-4	—	Saturday, ...	January 13	—	12-4	—
Latin, ...	Saturday, ...	February 2	9-10	—	—	Saturday, ...	February 2	9-10	—	—
Mineralogy and Geology, and Physical Geography, ...	Friday, ...	February 16	10-11	—	—	Friday, ...	February 16	10-11	—	—
Botany, ...	Saturday, ...	February 24	9-10	—	—	Saturday, ...	February 24	10-11	—	—
Microscopical, ...	Thursday, ...	March 30	9-10	and 1-4	—	Thursday, ...	April 6	9-10	and 1-4	—
English Literature, ...	Wednesday, ...	March 21	9-10	and 1-4	—	Wednesday, ...	April 6	9-10	and 1-4	—
History, ...	Thursday, ...	March 28	9-10	—	—	Thursday, ...	April 13	9-10	—	—
Practical Anatomy, ...	Monday, ...	April 20	9-10	—	—	Monday, ...	April 20	9-10	—	—
Medicine, ...	Friday, ...	April 28	9-10	—	—	Friday, ...	April 28	9-10	—	—
Anatomy and Physiology, ...	Saturday, ...	April 27	—	9-10	—	Saturday, ...	April 27	9-10	—	—
Principles of Medicine, ...	Monday, ...	April 20	9-10	and 1-4	—	Monday, ...	April 20	9-10	and 1-4	—
Medical Botany, ...	Monday, ...	April 20	9-10	—	—	Monday, ...	April 20	9-10	—	—
Principles of Surgery, ...	Monday, ...	April 20	—	9-10	—	Monday, ...	April 20	—	9-10	—
Medical Jurisprudence, ...	Thursday, ...	April 20	9-10	9-10	—	Thursday, ...	July 13	9-10	9-10	—
Natural Philosophy, ...	Thursday, ...	June 8	9-10	and 1-4	—	Thursday, ...	June 8	9-10	and 1-4	—
Quack (First Year), ...	Wednesday, ...	June 8	9-10	—	9-10	Wednesday, ...	June 8	9-10	—	9-10
" (Second Year), ...	Thursday, ...	June 8	9-10	—	9-10	Thursday, ...	June 8	9-10	—	9-10
Latin (First Year), ...	Thursday, ...	June 8	9-10	—	9-10	Thursday, ...	June 8	9-10	—	9-10
" (Second Year), ...	Wednesday, ...	June 8	9-10	—	9-10	Wednesday, ...	June 8	9-10	—	9-10
Engineering, Art, Text, and Red paper, ...	Thursday, ...	June 8	9-10	—	9-10	Thursday, ...	June 8	9-10	—	9-10
Classical and Modern, ...	Wednesday, ...	June 8	—	9-10	—	Wednesday, ...	June 8	—	9-10	—
Mathematics, ...	Friday, ...	June 7	9-10	—	9-10	Friday, ...	June 7	9-10	—	9-10
Modern Languages, ...	Thursday, ...	June 4	9-10	—	9-10	Thursday, ...	June 4	9-10	—	9-10
Chemistry, ...	Monday, ...	June 10	9-10	—	9-10	Monday, ...	June 10	9-10	—	9-10

General Examination of Students in Law and in Political Economy, and of Students attending Foreign Classes—Spring, Practical Chemistry, Medical Jurisprudence, Microscopy, and Physics—at the close of the Lectures respectively.

Appendix,
No. 4.Lectures
delivered
by Profes-
sors.

APPENDIX,

RETURN of the NUMBER of LECTURES delivered by each.

	1850, 1850.	1851, 1851.	1852, 1852.	1853, 1853.	1854, 1854.	1855, 1855.	1856, 1856.	1857, 1857.	1858, 1858.	1859, 1859.	1860, 1860.	1861, 1861.	1862, 1862.
Professor of—													
Greek, ...	135	232	244	246	236	240	231	235	236	360	400*	400*	440*
Latin, ...	162	197	216	221	189	196	232	230	230	275	398	234	234
History and English Literature, ...	55	55	96	91	104	100	105	105	90	110	123	92	154
Modern Languages,	208	330	324	307	306	305	319	340	300	307	340	372	372
Celtic, ...	6	6	6	6	6	6	6	6	6	6	6	6	—
Mathematics, . . .	135	256	333	248	246	320	316	322	330	400	400	370	370
Natural Philosophy	122	257	233	209	256	250	255	307	300	300	242	242	213
Chemistry, ...	134	136	137	129	132	130	138	142	142	140	132	132	132
Practical Chemistry	36	36	36	36	36	36	36	36	34	36	36	36	36
Natural History, .	120	120	133	137	139	138	142	140	140	140	140	140	140
Mineralogy and Geology, ...	Public	86	54	50	54	55	49	59	52	52	52	52	52
Logic & Metaphysics	—	—	78	142	176	175	164	177	179	167	149	158	194
Civil Engineering, .	134	136	140	135	140	136	147	118	100	104	196	220	198
Agriculture, . . .	172	200	205	212	209	211	218	186	190	166	166	156	156
Anatomy and Phy- siology, ...	115	116	115	115	114	115	117	113	115	115	115	112	108
Practice of Medicine,	93	93	92	92	93	94	94	85	75	95	90	90	95
Practice of Surgery,	93	94	93	91	91	92	94	94	94	94	94	94	94
Materia Medica, .	92	91	91	93	90	90	92	90	84	84	84	84	84
Midwifery, ...	92	92	92	91	90	93	93	93	93	95	90	80	80
English Law, . . .	24	48	72	96	96	96	96	6	96	96	72	72	96
Jurisprudence & Po- litical Economy, .	24	48	96	120	120	120	120	120	96	120	120	120	120

The above Return gives the number of Meetings of one hour each, in each Class. The system course; in some classes these examinations are held daily; in others on fixed days of the week. The Professors also conduct the General Scholarship Examinations; and some of them, in

* Including about 110 on .

No. 6.

Professor in the Queen's College, Belfast, in each YEAR.

1862, 1863.	1866, 1867.	1868, 1869.	1870, 1871.	1872, 1873.	1874, 1875.	1876, 1877.	1878, 1879.	1880, 1881.	1882, 1883.	1884, 1885.	1886, 1887.	1888, 1889.	1890, 1891.	1892, 1893.	1894, 1895.	1896, 1897.	1898, 1899.	1900, 1901.	1902, 1903.	1904, 1905.	1906, 1907.	1908, 1909.	1910, 1911.	1912, 1913.	REMARKS.	
360*	350	350	350	350	340	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	
234	230	224	224	224	219	219	219	219	219	219	219	219	219	219	219	219	219	219	219	219	219	219	219	219	219	
140	140	167	167	167	148	148	148	148	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	Besides correcting about 650 exercises.
360	355	356	356	356	406	406	406	406	406	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Open to the Public without charge.
316	325	330	317	317	286	296	296	296	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	Besides three hours each week on which the Senior Scholar meets the Junior Division.
182	180	180	190	190	288	288	288	288	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	In addition, arranging apparatus, which occupies as much time as the lectures.
132	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	In addition, superintending the working pupils, of whom from eight to twelve are admitted each year by examination to the laboratory without charge.
36	36	36	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	Including lectures in Physical Geography, delivered free to all students.
140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	In addition, daily attendance as Curator in the Museum.
52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	In addition, criticising very many essays in each session.
208	195	196	195	195	195	195	195	195	195	195	195	195	195	195	195	195	195	195	195	195	195	195	195	195	195	Including practical work under the direction of the Professor.
328	319	236	247	247	247	247	247	247	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	Including lectures on Medical Jurisprudence, for which there is no salary.
50	50	50	41	41	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	In addition, daily practical teaching in the dissecting-room for three hours by the Professor, and four hours by his assistant.
106	224	261	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	
95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	
93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	Besides about twenty-five lectures each session on Operative Surgery.
84	84	84	84	84	84	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	
76	76	78	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	Besides practical instruction to students which may be required at any hour throughout the year.
96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	No third year Class in 1859-60, or fourth year Class in 1860-61.
120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	

of instruction includes, not merely formal Lectures, but also examination in the business of the according to the nature of the subject.
addition, the Matriculation and Supplemental Examinations.

Sanskrit and Hindustani.

OCTOBER EXAMINATIONS of Queen's College, Belfast, 1872.

Days.	Hours.	First Two Subjects.	Second Two Subjects.	Third Two Subjects.	Fourth Two Subjects.
Tuesday, Oct. 15.	9-12		Engl. Ex. — { English, Mod. Lang. Math.	Engl. Ex. — Mod. Lang., Math. Nat. Phil., Chem.	Senior School — Latin.
	1-4		Engl. Ex. — Greek, Latin, English.	Engl. Ex. — Greek, Latin, Logic, English.	Senior School — Latin.
Wednesday, Oct. 16.	9-12		Junior School — Greek.		Senior School — Greek.
	1-4		Latin, Natural — Greek.		Senior School — Greek.
Thursday, Oct. 17.	9-12		Mod. English. } School — Chem.		Senior School — Chem.
	1-4	Natural — Math.	Mod. English. } School — Chem.		Senior School — Chem.
Friday, Oct. 18.	9-12	Maths. — Greek, Latin.			
	1-4				
Saturday, Oct. 19.	9-12	Metaph. — English, in Latin only.			Senior School — Mod. Phil., Nat. Phil.
	1-4	Metaph. — English, in English, &c.			Senior School — Mod. Phil., Nat. Phil.

Monday, Oct. 27.	2-4	Math. of Spherical Trigonometry to be made out.	Math. School.—Botany. Latin School.—English.	English School.—{ Greek and Phys. Geog.	Senior School.—Math. Hist. Junior School.—Math. Hist.
Tuesday, Oct. 28.	2-4	Botany.	Senior School.—Math.	English School.—Math.	Senior School.—Math.
	4-6	Math. School.—Math.	Junior School.—Math.	English School.—Math.	Junior School.—Math.
Wednesday, Oct. 29.	2-4	Math. School.—Math.	Junior School.—Math.	English School.—Math.	Junior School.—Math.
	4-6	Math. School.—Math.	Junior School.—Math.	English School.—Math.	Junior School.—Math.
Thursday, Oct. 30.	2-4	Math. School.—Math.	Junior School.—Math.	English School.—Math.	Junior School.—Math.
	4-6	Math. School.—Math.	Junior School.—Math.	English School.—Math.	Junior School.—Math.
Friday, Oct. 31.	2-4	Math. School.—Math.	Junior School.—Math.	English School.—Math.	Junior School.—Math.
	4-6	Math. School.—Math.	Junior School.—Math.	English School.—Math.	Junior School.—Math.

English, during the Supplementary Examination, complete the perfect year and obtain a certificate.

History of Lectures.—Session 1872-73.

Term.	Greek.			Civil Engineering.			Mechanics.	
	1st Year.	2nd Year.	3rd Year.	1st Year.	2nd Year.	3rd Year.		
1 Oct 20	French. Monday Wednesday Thursday German. Tuesday Friday	Algebra. Monday Tuesday Wednesday Thursday Friday		French. Monday Wednesday Thursday German. Tuesday Friday	Algebra. Monday Tuesday Wednesday Thursday Friday			
10 Oct 24	Algebra. Monday Tuesday Wednesday Thursday Friday	French. Monday Tuesday Wednesday German. Thursday Friday	Star Class.	Algebra. Monday Tuesday Wednesday Thursday Friday				
11 Oct 27	Latin. Monday Wednesday Friday	Lat. Philo. Tue. Philo. Monday Tuesday Wednesday Lat. Philo. Thursday	Eng. 1st Monday Wednesday Friday	Eng. 1st Monday Wednesday Friday Geom. Tuesday Thursday	Mechanics and Drawing. Monday Wednesday Friday Lat. Philo. Tuesday Thursday	Office and Field Work. Tuesday Thursday	Eng. Philo. 1 week. Monday Wednesday Friday	Prin. Chem. (for 1st and 2ndnd Half Class.)
12 Oct 31	Greek. Monday Tuesday Friday	Latin. Monday Tuesday Wednesday Friday	Algebra. Monday Tuesday Wednesday Friday Monday	Geom. Discontinued Office Work. Tuesday Thursday	Office and Field Work. Monday Thursday	Office and Field Work. Tuesday Thursday	Associated Demonstrations. Monday Tuesday Wednesday Thursday Friday	

	Ordn. Monday Tuesday Wednesday Thursday Friday	Ordn. Monday Tuesday Wednesday Thursday Friday Sat. (morning)	Ordn. Monday Tuesday Wednesday Thursday Friday	Ordn. Monday Tuesday Wednesday Thursday Friday	Ordn. Monday Tuesday Wednesday Thursday Friday	Ordn. Monday Tuesday Wednesday Thursday Friday	Ordn. Monday Tuesday Wednesday Thursday Friday	Ordn. Monday Tuesday Wednesday Thursday Friday	Ordn. Monday Tuesday Wednesday Thursday Friday
1									
2	English Monday Tuesday Wednesday Friday	Latin Tuesday Wednesday Thursday Friday	1st. History Tuesday Wednesday Thursday Friday						
3			Chemistry Monday Tuesday Wednesday Thursday Friday	Geology Monday Tuesday Wednesday Thursday Friday					
4					First, Work and Engineering (Experimental) with theoretical Lectures for 1st and 2nd Year Students commonly on Fridays and Saturdays after noon.				
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TURNER MEDICAL CLASSES, COMMENCING MAY 1, 1901.

Practical Chemistry.	Monday, Tuesday, Wednesday, Thursday, Friday, from 11 a.m.
Anatomy.	Monday, Tuesday, Wednesday, Thursday, Friday, 1 p.m.
Experimental Physics.	Monday, Wednesday, Friday 1 p.m.; Tuesday, Thursday, 12 a.m.
Practical Pathology.	Monday, Tuesday, Thursday, 4 till 5
Microscopy.	Monday, Tuesday, Thursday, Friday, 4 till 5.

FACULTY OF LAW—ROOMS OF LECTURE.

1st Year.			2nd Year.			3rd Year.			4th Year.		
1st Year.	2nd Year.	3rd Year.	1st Year.	2nd Year.	3rd Year.	1st Year.	2nd Year.	3rd Year.	1st Year.	2nd Year.	3rd Year.
Law of Property. Monday Tuesday Wednesday Friday	Law of Property. Monday Tuesday Wednesday Friday	Law of Property. Monday Tuesday Wednesday Friday	Law of Property. Monday Tuesday Wednesday Friday	Law of Property. Monday Tuesday Wednesday Friday	Law of Property. Monday Tuesday Wednesday Friday	Law of Property. Monday Tuesday Wednesday Friday	Law of Property. Monday Tuesday Wednesday Friday	Law of Property. Monday Tuesday Wednesday Friday	Law of Property. Monday Tuesday Wednesday Friday	Law of Property. Monday Tuesday Wednesday Friday	Law of Property. Monday Tuesday Wednesday Friday

APPENDIX, No. 7.

Appendix,
No. 7.
AN ENLARGED DIGEST OF SUBJECTS AND COURSES PURSUED IN
Queen's College, Belfast.

Digest
of Subjects
and
Courses.

GREEK—Professor, *Charles MacDonnell*, LL.D., M.R.A.S.

In the Greek Class, as in all those which are attended during more than one session, the business, as well as the hours assigned to the Students of the different years, is necessarily different; but it is always distributed into three simultaneous processes, viz., public examinations, lectures more or less formal, and exercises written at home and commented on in the class.

In the first session, the complex and self-contained structure of the Greek language is subjected to a close analysis; carried out, on the one hand, by tracing words to their crude forms, by classifying terminations, both the primary and the flexional, and by discriminating among analogically correct forms those actually used in different ages and dialects; on the other hand, by exhibiting the methods by which words are combined in simple clauses, clauses are knit into sentences, and sentences compose periods less or more complicated. Some prose-work furnishes the materials for this analysis; while the Students read and translate it, or else re-translate off-hand passages read out in English before them by the Professor. Besides syntactical phenomena, the laws and characteristics of both epic and dramatic versification are expounded and exemplified, while a portion of the *Iliad* and some tragedy are used as text-books.

In the second session, while consecutive passages of Herodotus along with some Attic oration or philosophical treatise, and a portion of the *Odyssæia* along with some Attic tragedy or comedy, form the basis of prolections, the previous discipline is continued and extended; the distinctions of dialect and style are more fully elucidated; the origin, growth, and fortunes of the epic, the drama, history, and other departments of literature, are more distinctly unfolded; discussions on points of mythology, geography, chronology, archaeology, aesthetics, &c., are more freely introduced and more amply treated. The Students are invited to turn Herodotean Greek, at sight, into Attic, altering both the forms of words and the structure of sentences; to re-translate passages into Greek prose and verse; and also to give in original essays in both forms of composition.

In a distinct or higher class, advanced Students, generally in the third or fourth year of their Course, are exercised in the study of more difficult works than those previously read, in the higher problems of criticism and philology, and especially in composing both prose and verse.

The following Text-books have been used in the successive Sessions of College from 1849-50 to 1872-3:—*The Iliad*, all the Books except I., II.; *the Odyssæia*, Books I. to XX. (inclusive); Herodotus, *Theogonia*; Pindarus, *Olympia*, *Pythia*, *Nemæa*; Aeschylus, all the Tragedies except the *Suppliants*; Sophocles, the seven Tragedies; Euripides, all the Plays except the *Cyclus*; Aristophanes, *Nubes*, *Aves*, *Ranæ*; Herodotus, portions of Books I., II., III., IV., VII., VIII., IX.; Thucydides, Books I., II., VI., VII.; Xenophon, portions of *Anabasis*, *Memorabilia Socratis*, and *Cyropaedia*; Platon, *Apologia Socratis*, *Gorgias*, *Phædon*, *Phædrus*, *Philebus*, *Protagoras*, *Theætetus*, *Timæus*, *Mænus*, and Books I., II., VII., and X. of *Respublica*; Aristoteles, *Poetica* and portions of *Rhetorica*; Demosthenes, c. *Meidiam* and *de Corona*; Aeschines, in *Ctesiphontem*.

The SANSKRIT and HINDUSTANI CLASSES, conducted during six Sessions by the Professor of Greek, have been discontinued.

LATIN—*Professor, William Nesbitt, M.A.*

*Appendix,
No. 7.*

The Professor of Latin gives three lectures weekly to Students of the First, and the same number to Students of the Second Year, attendance upon which is compulsory for all that take the Latin Classes. Besides these compulsory lectures, he gives two lectures additional to Students of each of these years, attendance on which is voluntary, in which more difficult authors are read, and special attention is paid to composition. The attendance on these lectures is very good. That on the general classes reaches, in the first two terms, a daily average of perhaps 90 per cent. of those enrolled: the voluntary classes are, this year, attended by about two-fifths of the Students of the First, and one-third of the Students of the Second Year.

An honor Class has been formed of Students of the Third and Fourth Years, chiefly attended by those who are anxious to distinguish themselves in Ancient Classes at the Degree Examination.

The Professor lectures thirteen hours each week throughout the Session, extending, with short intervals at Christmas and Easter, from the beginning of November to the beginning of June.

The proficiency of the Students depends, of course, to a considerable extent, upon their preparation at entrance. It has been the aim of the Professor, without fixing any fancy standard, to make the matriculation examination as strict as is consistent with the state of intermediate education in the province. Several important schools, he is happy to say, have been called into existence by the influence of the Queen's College, and many more have been largely benefited, as well by its reflex action as by the large number of efficient teachers that it has supplied. Still this department of our educational system remains in a very unsatisfactory condition, and its organization—a work far beyond the reach of private enterprise—is confessedly the great desideratum of educational reform. At present, the practical requirement of this College in the Latin language from candidates for matriculation is that they should be able to read aloud a portion of a Latin author, in such a way as to retain the attention of the class; and this requirement is fairly met. Members of the class must, at each lecture, when called upon by the Professor—and all are called upon without any fixed order—translate into English a portion of the book which forms the subject of the term, and render into Latin an easy exercise.

In this way pass Students of the first year are expected, during the session, to get through some such course as this:—A book of Livy, the Catilinarian Orations, and, if possible, one of the shorter philosophical treatises of Cicero; while those that attend the voluntary class read, in addition, say, two books of the Georgics of Virgil, together with selections from Terence and Juvenal; and no Students are allowed to rise to the Second Year who fail to pass a satisfactory examination in at least the subjects of the pass course.

In the Second Year, pass men read with great care, under the same conditions as are observed in the First Year, some such course as this:—Three books of Cicero's Letters, and as many of Horace's Satires as can be got through, continuing their efforts to attain, if not elegance, at least grammatical correctness in writing easy Latin; while the members of the Voluntary Class are expected, in addition, say, to complete the Georgics of Virgil, and to read a part of the Epistles of Horace, with selections from the Annals of Tacitus.

At the end of the Second Year pass men have completed their Latin studies, and having passed the first examination in Arts at the University, are set free to pursue for their degree studies for which they have more special aptitude.

The Third Year's Latin Class is therefore strictly an Honor Class, and its members read as many of the authors prescribed for classical honors at the University as can be brought within the limits of the Session. Last year the books read were the Pro Cluentio of Cicero, with selections from the Histories of Tacitus, from Plautus, and from Lucretius.

During the whole Session, passages such as are set at Honor Examinations are rendered into Latin by the members of the Voluntary and Honor Classes, and their versions are carefully corrected by the Professor at home, and made the subject of comment in the class. Latin philology is studied with the aid of the excellent text books of Roby and Peile.

* I take as an example the actual course of the present year.

The Professor has made his *résumé* by the desire of the President, who thinks it due to the Legislature and the public that, at a time when so much laxity of statement is indulged in, an authentic account of the work of the College should be furnished by those to whose hands its teaching has been committed. If the Professor may be permitted to state his impression as to the results of that teaching, he would say that the attainments of the pass men—as might be expected from their punctual attendance upon lectures, and their very commendable diligence—are higher than those of the corresponding class in the University with which he is most intimately acquainted—the University of Dublin; while the attainments of honor men, who usually start from a much lower level, fall considerably short of those of the best men in that University. They may be represented by high distinction at such examinations as that for the Civil Service of India.

HISTORY AND ENGLISH LITERATURE—*Professor, Charles Duke Yonge,*
A.B. OXON.

Class of the English Language.

The business of this Class is conducted by—

A Course of Lectures on the Origin, Formation, Inflections, and Grammar of the English Language, for which Dr. Latham's "English Language" forms in some degree the text-book;

With occasional Lectures on the rules and principles of Prose Composition, and Weekly Essays.

Class of English Literature.

The business of this Class is conducted by—

A Course of Lectures on English Literature in general, and particularly on the lives, works, and styles of the best authors in each department;

With Special Lectures also on the works appointed as the subjects for the Dublin Autumnal Examination of the ensuing year, with and without Honors;

And Fortnightly Essays.

Class of History.

The business of this class is conducted by—

Lectures on History in general;

Lectures on English History, embracing rather the larger half of the entire course;

A subsequent course on the History or that portion of the History of any other country which is selected as a subject for the Dublin Autumnal Examination of the ensuing year.

MODERN LANGUAGES—*Professor, Albert Ludwig Meisner, PH.D.*

The instruction in Modern Continental Languages embraces three courses each for French and German, extending over three terms, and a course of Italian during the first two terms, attendance on which is voluntary.

No entrance examination is as yet held in Modern Languages, in consequence of which the insufficiency of intermediate teaching is more apparent in this department than perhaps in any other. The consequence of this is, that the Professor is over-burdened with a great amount of elementary teaching, without which his classes cannot be kept in good working order. The number of lectures delivered during the past session was no less than 406. Something, it is hoped, may be done to relieve the Professor of some part of the elementary teaching, so as to increase his usefulness in the more advanced classes.

Students in Arts and Medicine, and in the department of Engineering, are required to attend lectures on one Modern Language for one session. The majority select for this purpose the French language; several, however, attend both French and German. For Students in Arts of the second and higher years, Modern Languages form one in a group of four subjects, out of which they select two.

The work of the classes, especially during the first two terms, is carried on to a great extent by means of *vis à vis* questions and answers. Frequent oral

examinations are held, and at each meeting of the classes a passage is translated from English into French or German.

In the First Session the Grammar and the principles of composition are explained, and select passages are translated from French and German Classics.

In the Second Session a systematic course of composition is gone through, and the Students are made acquainted with the principal authors of French and German Literature.

In the Third Session a course on the elements of Comparative Grammar is delivered, which is followed by a course on some period of Continental Literary History. The students write essays in Modern Languages, which are read and discussed in the class.

Medical Students unable to attend the classes in Arts, are instructed in a separate class.

About six per cent. of the Students attending Lectures on Modern Languages are Non-Matriculated.

MATHEMATICS—*Professor, John Purser, M.A.*

Attendance on this Class is prescribed to all Students in the Faculty of Arts during the first year of their Course; during the second year Mathematics forms one of four Courses, out of which the Students select two.

All Students in the Department of Engineering are required to attend the Mathematical Classes during two years.

Before entering, Students are required to pass an examination in the First and Second Books of Euclid, and in a small portion of Algebra. Practically they come fairly prepared in the prescribed portions of Euclid, but a large proportion can hardly be said to possess even an elementary knowledge of Algebra. A considerable number of the Students are Candidates for Mathematical Scholarships at entrance, and these are generally well prepared in the first six Books of Euclid, and a considerable portion of Algebra and Plane Trigonometry.

On this account the instruction of the First Year in Mathematics has been given in two Divisions. The Lower Division is carefully taken through such portions of Euclid I., II., III., IV., VI., as they have not previously prepared, and is instructed in Algebra as far as the progressions, and in Plane Trigonometry as far as the solution of triangles, with the use of logarithms and trigonometrical tables. In the Upper Division a more advanced course of lectures is given in Geometry, Plane Trigonometry, and Algebra, to which is added either the Conic Sections, treated geometrically, or Spherical Trigonometry.

The Council has sanctioned the employment of the Senior Mathematical Scholarships giving a portion of the instruction of the Lower Division. This arrangement, while it affords a greater number of hours to the Lower Division, enables the Professor of Mathematics to give more attention to the Upper Division, and has been found to work very satisfactorily.

In the Second Year the subjects of Lecture are Analytical Geometry, the Differential and Integral Calculus, and the first three sections of the *Principia* of Newton.

In the Third Year an Honour Course is given, in which are taught the higher branches of the Calculus, Geometry of Three Dimensions, and Differential Equations.

NATURAL PHILOSOPHY—*Professor, Joseph David Everett, M.A., D.C.L.*

The Classes in this Department are arranged under the three heads of Experimental Physics, Mathematical Physics, and Natural Philosophy Applied.

All Students in the Faculty of Arts in their Second Year attend the Classes of Experimental and Mathematical Physics. Engineering Students attend the Class of Experimental Physics in their First Year, the Class of Mathematical Physics in their Second Year, and the Class of Natural Philosophy Applied in their Third year. Medical Students attend the Class of Experimental Physics only.

In all these Classes the teaching is by prelection interspersed with oral examination.

The subjects treated under the head of Experimental Physics include—Properties of Matter, Mechanical Powers, the Elements of Hydrostatics and Hydraulics, Heat, Light, Sound, Electricity, and Magnetism; the leading principles in these several departments being broadly laid down and copiously illustrated by experiments.

*Appendix,
No. 7.*

*Digest
of Subjects
and
Courses.*

Appendix,
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The Course of Mathematical Physics includes a rigorous demonstration of the principal theorems in Statics and Kinetics, an explanation of the leading principles of Astronomy, Geometrical Optics, and the Mathematical treatment of numerous questions connected with the subjects of the Experimental course.

In the Class of Natural Philosophy Applied, the subjects include a more advanced course of Statics, Kinetics, and Hydrostatics, involving application of the Differential and Integral Calculus, and illustrated by practical examples, Kinematics, including the principles of Mechanism, the relations of Stresses and Strains, Moduli of Elasticity and Rigidity, Work Done, Kinetic and Potential Energy, Elements of Thermodynamics.

In addition to the above-named Classes, there is an Honor Class, attended by Senior Students, in which the subjects prescribed for University Honors are studied.

CHEMISTRY—*Professor, Thomas Andrews, M.D., F.R.S., M.R.I.A.*

In the Class of Chemistry the greater part of the Course is devoted to pure Chemistry; but the Elements of the Sciences of Heat and Electricity, particularly in their relations with Chemistry Proper, are also taught. The application of these sciences to the arts are particularly referred to; and it has been the constant endeavour of the Professor to communicate to the Students as precise and accurate information as possible on the subjects treated in his Lectures, and to train them to habits of careful observation and accurate thinking. With this view a weekly examination of the whole Class is held, at which the Students are subjected to a searching examination on the business of the preceding week; and further to encourage a taste for scientific inquiry, and also to train a certain number of practical chemists, a limited number of the Students are admitted, by examination, as working pupils into the chemical laboratory, where they have an opportunity of acquiring a knowledge of chemical analysis. This latter arrangement has now been in practice for several years, and has been attended with the best results.

NATURAL HISTORY—*Professor, Robert O. Cunningham, M.D., F.L.S.*

The Zoological Department of the Course occupies the First Term and greater part of the Second, and comprehends the Outlines of Anatomy and Physiology of animals, followed by Systematic Zoology, and remarks on the distribution of animals.

The Botanical part comprehends Vegetable Anatomy and Physiology, Systematic Botany, and distribution of vegetable forms. In addition to the Class Lectures, meetings are held in the Botanic Garden, and practical excursions made into the neighbouring country.

This Course comprehends chiefly Lectures on the structure and form of continents and islands; the distribution of mountain systems, rivers, and lakes; the ocean, its currents, temperature, &c.; the atmosphere, its currents, &c.; rain, snow, &c. The preceding subjects are considered in relation to the geographical distribution of animals and plants.

These different branches are illustrated by specimens, or drawings, or both, as the case may be.

GEOLOGY AND MINERALOGY—*Professor, Robert O. Cunningham, M.D., F.L.S.*

The Courses consist of lectures, demonstrations, and examinations. The Geological Course embraces the general principles of the science, and a detailed investigation of the palaeontological, lithological, and economic characters of all the formations. The Students are exercised in the practical use of the necessary instruments, and in the construction of Geological maps and working sections. The characteristic fossils of the different formations are rendered familiar by the exhibition of specimens and models, and an excellent series of drawings. Drawings are also used for the illustration of the underground workings of mines of copper, coal, &c.

In the Mineralogical Course the Students are instructed in the most modern crystallography by models, and exercised with the reflecting goniometer. The electro-chemical classification of minerals is then explained, and an extensive suite of minerals in the Museum is arranged on that system, for the instruction of the Students.

Once a week examinations are held, and additional explanations given of the subjects of the preceding lectures.

LOGIC AND METAPHYSICS—*Professor, John Park, M.A.*

*Appendix,
No. 7.*

LOGIC.

This class meets at 2 P.M., on Tuesdays, Wednesdays, Thursdays, and Fridays, during the First, and part of the Second Terms of the Session. Digest of Subjects and Courses.

The business of the class is conducted by lectures on Logic, or the science of the conditions on which depend valid inferences and the correct expression of evidence, containing under it Formal Logic (the theory of symbolical proof), and Material Logic; by examinations on the lectures and on Fowler's "Elements of Deductive Logic," and "Elements of Inductive Logic," and by the criticism of Essays on Logical subjects, of which four are required from each Student.

Students should read Morel's "Handbook of Logic," and Bacon's "Novum Organum," Book I., before entering the class.

METAPHYSICS.

This class meets at noon, on Tuesdays, Wednesdays, Thursdays, and Fridays, during the First and Second Terms of the Session.

The business of this class is conducted by lectures on Psychology, or the science which investigates the phenomena of the human mind and their conditions; and Metaphysics Proper, or the science which investigates the Nature of Truth and of Existence; by examinations on the lectures, on Mansel's "Metaphysics," and on Dr. Stirling's Translation of Schwegler's "Handbook of the History of Philosophy"; and by the criticism of Essays on Metaphysical subjects.

HIGHER LOGIC.

This class meets three times a week during the First and Second Terms of the Session, and is conducted by lectures, and a course of reading and examinations. Especial attention is paid to the subjects contained in the Degree Honor Courses of the ensuing year.

CIVIL ENGINEERING—*Professor, James Thomson, M.A., C.E.*

The Courses of lectures and practical instruction given by the Professor of Civil Engineering are arranged to accord with the Ordinances of the Queen's University, which prescribe to candidates for the Diploma in Civil Engineering a Curriculum extending over three Sessions usually, but admitting of abbreviation to two Sessions in the case of students whose previous acquaintance with a sufficient group of the subjects prescribed for study in the first and second Sessions of the ordinary Course shall be deemed by the College Council satisfactory.

For the First Year Students the Professor gives a course of instruction, comprising lectures and oral examinations on the Principles of Geometrical Drawing, and the performance by the students of practical work under his direction. The lectures include the principles of descriptive geometry, orthographic and isometric projection, and linear perspective; and the practical work comprises the performance of examples in these subjects, and the execution of drawings in Mechanical Engineering, and occasionally also in Architecture and Civil Engineering. The Class meets for two hours at a time on two days per week during the three Terms of the College Session.

For the Second Year Students two courses are conducted by the Professor of Engineering, of which one is a Lecture Course and the other a Practice Course. The Lecture Course comprises surveying, levelling, and plotting, with the theory and use of the instruments required in surveying and levelling operations; mensuration of earthworks for railways; setting out works on the ground, including ranging of railway curves, and setting out breadths of cuttings and embankments, and ranging tunnels, &c. The Course also comprises usually some of the following subjects:—revision and farther prosecution of descriptive geometry, and perspective, and other subjects of geometrical drawing; designing and drawing of oblique bridges; properties and qualities of materials used in construction, and modes of procuring them; and an introduction to architecture as a fine art.

In the Practice Course of the Second Year the Students are engaged in the performance of office and field work, under the instruction and direction of the

Professor; and the business includes surveying, levelling, drawing, mapping, and the computation of areas of lands, and other engineering calculations. Excursions are also made occasionally during the Session to visit Engineering works.

For the Third Year Students there are (as for those of the Second Year), two Courses conducted by the Professor, one a Lecture Course, and the other a Practice Course. The Lecture Course comprises the further treatment of some of the subjects proposed to be entered on in the Second Year, and most of the following subjects:—foundations, cofferdams, bridges, tunnels, roads, and railways; specifications for engineering contracts; water-works for supplying towns; science of the flow of water in orifices, pipes, and canals; drainage of fens by gravitation, and by steam power and other mechanical means; regulation and improvement of rivers; science of the strength of materials and structures; ventilation of dwelling-houses, public buildings, and mines; processes and mechanisms used in foundries and engineering workshops.

The Practice Course includes office work, field work, and engineering excursions.

ANATOMY AND PHYSIOLOGY—*Professor, Peter Redfern, M.D. Lond., F.R.C.S.*

The Department of Anatomy and Physiology comprises two distinct Courses of Lectures—one on Anatomy and Physiology, the other on Descriptive and Surgical Anatomy, and also the teaching of Anatomy by Dissections throughout the day.

The Course of Anatomy and Physiology includes about 144 meetings, each of an hour's duration, held on the first five days of each week from November to April inclusive. These meetings are for lecture and occasional examinations on the subjects previously considered in the lectures. The lectures include a complete course of the Anatomy and Physiology of the general textures of the body, including the blood, chyle, &c., and a systematic account of the whole of the viscera, treated of as they are associated in groups for the several purposes of digestion, circulation, respiration, urination, innervation, and generation; also the organs of sense. In treating of every part or organ its healthy state is shown by recent dissections and by preparations from the Museum illustrating it in man and animals, its diseased states and actions being referred to at the same time and contrasted with the healthy ones. The textures not visible to the naked eye are shown under a series of achromatic microscopes, so that during the Course every student in the class has an opportunity of judging for himself of the true characters of each part, and, by becoming familiarized with these, of recognising each when changed by disease.

The Course of Practical Anatomy and Anatomical Demonstrations includes:—
1st. Dissections carried on throughout the day under the immediate superintendence of the Professor of Anatomy and Physiology, and the Demonstrator. Each Student is required to be steadily engaged in dissections during the whole Session. For this purpose the supply of subjects is regular and abundant, and thus affords the surest foundation for efficient medical teaching.

2nd. This Course includes the Anatomical Demonstrations, which consist of a complete Course of Descriptive and Surgical Anatomy, commencing with the anatomy of the skeleton and bones, and including the anatomy of the limbs and other parts, excluding that of the viscera and the physiology treated of in the Course of Anatomy and Physiology. The demonstrations are given on each of the first five days of the week, and are about 117 in number in each Session.

PRACTICE OF MEDICINE—*Professor, James Cuming, M.D.*

The class meets four times each week, from the first week of November to the last of the following April.

An examination is held usually once a fortnight. The Course embraces the principles of Inflammation, Fevers, the diseases, organic and functional, of the viscera of the three great cavities of the human body. In treating of individual diseases, their pathology, semeiology, etiology, and treatment, are the subjects chiefly dwelt on. Wherever it is possible, pathology is illustrated by the preparations afforded by our Museum, by drawings and plates, or by recent specimens. It may be added that the Professor's present connexion with the Belfast General Hospital adds greatly to the means of making his Course more useful and interesting to students.

THEORY AND PRACTICE OF SURGERY—*Professor, Alexander Gordon, M.D.* *Appendix, No. 1.*

Four Lectures are delivered weekly during the Medical Session. An examination is held each day on the subject of the preceding day's Lecture. Each Course comprises the following subjects:— *Digest of Subjects and Courses.*

Inflammation,	Diseases of the Bursae,
Suppuration,	„ Bone, benign and malignant,
Mortification,	„ the Jaws and Mouth,
Erysipelas,	„ the Fingers and Toes,
Burns,	„ Female Breast,
Ulcers,	„ Anus and Rectum,
Wounds,	„ Testis,
Hæmorrhage,	„ Hernia,
Diseases of the Arteries,	„ Prostate,
„ Veins,	„ Bladder,
Fractures of Trunk and Extremities,	„ Eyes,
„ Cranium, Injuries of the	„ Larynx,
Brain and Scalp,	Syphilis,
Dislocations,	Gonorrhœa,
Diseases of the Joints,	Stricture.

All the capital and minor operations are performed on the dead subject. The Professor delivers a separate Course of twenty-five Lectures on Operative Surgery.

MATERIA MEDICA—*Professor, James Scaton Reid, M.D.*

This Course includes—

- 1st. General Pharmacology, or the modes in which medicines act upon the living organism in a state of health.
 - 2nd. Therapeutics, or the modes in which medicines act as curative agents.
 - 3rd. Pharmacy.
 - 4th. Dietetica, a review of the different kinds of food used in health and in disease.
 - 5th. Special Pharmacology, or the history, composition, uses, and modes of administering medicinal agents for the cure of disease.
- The Class meets four times each week. An examination is held once every week.

MIDWIFERY—*Professor, Robert F. Dill, M.D.*

Lectures four times a week during the six winter months consist of following subjects:—

- Anatomy of the pelvis, so much as is required for midwifery. Its measurement and pelvimeters.
- Contents of the pelvis. The functions of the uterus in its virgin state.
- Conception—length of gestation—changes of the uterus and its appendages during gestation.
- Growth of child from its earliest seen form until its full puerile size.
- Graafian vesicle and corpus luteum. Fetus, its circulation, signs of maturity, weight, and length.
- Plural births.
- Proportion of births and deaths of males to females.
- Superfœtation.
- Signs of pregnancy.
- Signs of approaching labour.
- Natural labour, its progress; also the positions and progress of child till its separation from its mother.
- Management of natural labour, including the arrangement of the bed and bed-room, and the proper dress and posture of the patient.
- Tedious labour, its causes and treatment.
- Labour requiring the use of instruments; their application taught on models in the class.
- Cæsarean section and Sigault's operation—how to prevent the fetus from getting large in uterus.

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Premature labour—how to bring it on, and when it is necessary to do so.

Cross-births and their treatment.

Abortion—how to prevent it.

Extra uterine gestations—how they occur, and their treatment.

Management of women after delivery, and treatment of such accidents and diseases as occur at this period.

Management of children after birth, washing, dressing, food, &c., and the choice of a wet-nurse, and treatment of such accidents as take place at this period, or soon after.

Practical midwifery taught by pupils attending patients in their own houses and in the Lying-in hospital, where Clinical Lectures are given.

MEDICAL JURISPRUDENCE—*Professor, Dr. Hodges.*

The Lectures in this Course are delivered twice weekly during six months. They include an account of the history and chemical investigation of poisons, and of the various subjects respecting which the evidence and assistance of Medical Practitioners may be required in Courts of Law. Experimental illustrations of the methods to be pursued in medico-legal inquiries are given, and frequent examinations held to test the progress of Students. No salary has been allocated to the Teacher of this department, and the duties, at the request of the Council, have, since the opening of the College, been performed by Dr. Hodges.

ENGLISH LAW—*Professor, Echlin Molgrew, Q.C.*

The Course of the *First* year in this department comprehends the elements of real and personal property, with the principles of conveyancing; that of the *Second* consists of an introduction to the principles and practice of Courts of Equity and the law of Bankruptcy; the *Third* Course includes the common law as incident to contracts, the nature and form of remedies by civil action, and an outline of criminal law, theoretical and administrative, which last completes the Curriculum of instruction required for the attainment of the Diploma of Elementary Law in the Queen's University. The subjects prescribed for Students of the *Fourth* year to qualify them for the Degree of LL.B. embrace a more extended and detailed course of the subjects already enumerated, including the law of wills, powers, evidence, and procedure.

JURISPRUDENCE AND POLITICAL ECONOMY—*Professor, T. E. Cliffe Leslie, LL.B.*

The subjects embraced in the Course of Lectures on *Jurisprudence* are according to the regulations of this College, (1) the Elements of Jurisprudence, (2) Civil Law, (3) Constitutional Law, (4) Colonial and International Law.

In the treatment of these subjects both the *Historical* and *Philosophical* Methods are followed in the Lectures of the Professor. The *Historical* Method, for example, is applied in tracing the principal changes through which the laws of England have passed, the assignable causes of such changes, and the degree and manner in which, in comparison with the laws of Continental Europe, the laws of this kingdom have been affected by contact with the principles of Roman legislation. The method of *Philosophical Analysis*, on the other hand, is applied in investigating the doctrines of the foundation and classification of rights, the several parts and legitimate form of a complete code, the relation of Scientific Jurisprudence to other departments of Social Philosophy, and the means of improving the state of Positive Law as deducible from such considerations.

The subjects which a Course of Lectures on *Political Economy* must embrace are fewer and more definite than those classed under the less advanced and more complicated Science of Jurisprudence. It is the Professor's endeavour to illustrate the principles of Economic Science by the help of those practical applications which will be most interesting and useful in a large commercial town.

APPENDIX No. 8.

GENERAL CLASS EXAMINATION AT THE END OF THE
SESSION 1872-73.

Appendix,
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General
Class Ex-
amination.

FIRST YEAR STUDENTS.

HISTORY AND ENGLISH LITERATURE.—*Examiner, Professor Yonge.*

1. Trace the origin of the English language; enumerating the different languages from which it has received contributions; and the circumstances which gave them their influence.

2. Dr. Latham raises the question how far English nouns and verbs can be said to have inflections. Examine his statements, and the question in general.

3. Examine and explain the differences between *shall* and *will*, and the proper mode of using either form.

4. In compound words, which is the portion which qualifies or defines the other? Give instances.

5. State the distinction which Dr. Latham draws between the etymologist and the metaphysician, as far as they are employed in the analysis of language.

6. Professor Max Muller divides the language of these islands into Anglo-Saxon, Semi-Saxon, Early English, Middle English, Modern English; what are the periods which he fixes for each; and what political or historical events may be supposed to have influenced or affected the different transitions or gradations?

7. "It was usual formerly to speak of *Japhetic*, *Hamitic*, and *Semitic* languages. The first name has now been replaced by *Aryan*." (*Max Muller, Lect. viii.*) What was the meaning of the term *Arya*; how did it come to be connected with European languages; and what are the principal languages now classed as *Aryan*?

8. Quote Max Muller's statements with respect to the use of the word *case* as applied to the inflection of nouns; and especially what he says about *casus rectus*; and the *genitive case*.

9. "If you described his conduct to me that I may avoid a similar error, I am greatly obliged: and will certainly take all possible pains that you shall see the reward of your care in my own good behaviour: but I could have wished that you add to your admonition an explanation of the evil consequences of such misconduct as his. His act was certainly tantamount to saying 'I do this that I might show my independence of spirit,' and he had certainly been acquitted by most men if not praised, if the consequences did not prove mischievous." Examine this sentence: correct any grammatical errors; illustrating any observations which you desire to make by similar usages in Latin.

1. Write a short Essay on the Drama, especially on Tragedy: illustrating your remarks by references to the play of Macbeth.

2. Write notes on the following passages:

If the assassination

Could trammel up the consequence: and catch
With his surcease success; that but this blow

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amination.

Might be the be-all and the end all here,
But here upon this bank and shoal of time
We'd jump the life to come.

His two chamberlains
Will I with wind and wassail so convince,
That memory, the warble of the brain,
Shall be a fume : and the receipt of reason
A limbeck only.

And some I see
That twofold balls and treble scepters carry.

3. How far may *Macbeth* be reckoned among the historical plays of Shakespeare?

4. What is the object which Pope sets himself to prove in the first Epistle of the *Essay on Man*?

5. Explain the historical allusions in the following lines :

"If plagues or earthquakes break not Heaven's design
Why then a Borgin or a Catiline?
Who knows but he whose hand the lightning forms,
Who heaves old ocean, and who wings the storms ;
Pours fierce ambition into Caesar's mind,
Or turns young Ammon loose to scourge mankind?"

6. What does Lord Macaulay say of the influence of the character of King John on the condition of England in his own and subsequent ages?

7. "We have now reached a point at which the history of the great English Revolution begins to be complicated with the history of foreign politics." (*Hist. of England*, c. ii.) What is the exact time of which the historian is speaking?

8. What was the state of literature and general education in England in the reign of Charles II. as described by Lord Macaulay in his third chapter?

SECOND YEAR STUDENTS.

LOGIC.—*Examiner, Professor Park.*

1. Briefly explain and criticise :—

"Logic may be considered as the Science, and also as the Art, of Reasoning."

"The laws of thought, and not the laws of reasoning, constitute the adequate object of the science."

"Logic is not the theory of Thought as Thought, but of valid Thought."

"Formal Logic is of very great, though purely negative value."

"Logic is not the science of Belief, but the science of Proof."

"Language is an instrument of thought, and Formal Logic is wholly conversant about language."

2. Reconcile :—"All predication is classification."

"When I say that snow is white, I am not thinking of white objects as a class."

3. Whence arises the utility of Definition? What is a Real Definition? How do you test a definition that seems (1) too wide, (2) too narrow? Explain:—*Definitio sit adaequata definito, et per se clarior et notior.*

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amination.

4. Discuss the nature and the logical value of the predicables.

5. Should we seek for the meaning of words in what they denote? Interpret the proposition, "Snow is white," in extension and in comprehension.

6. Designate by the proper symbol, and give the converse and the logical opposites of:—"Tully is Cicero." "Man is dear to Man."

"The sensations are all of which I am directly conscious."

"He only judges right who weighs, compares."

"We must run glittering like a brook
In the open sunshine, or we are unblest:
The wealthiest man among us is the best:
No grandeur now in nature or in book
Delights us."

7. Name and examine these inferences:—

(1.) Every sin contradicts the moral consciousness; therefore there is no sin which does not contradict the moral consciousness, whatever contradicts it is sin, and whatever does not contradict it is not sin.

(2.) "If it deserves to be commended, it is more than justified; for some practices that may be justified deserve no commendation; yet there are none that deserve commendation but may be justified."

(3.) He is not a fool, and therefore he is wise.

(4.) Every good thing is beautiful, and what is not good is not beautiful.

8. What is illicit process? What is an indirect mood? Why was the first figure called *Figura Perfecta*? Name the moods in which both premisses are universal but the conclusion only particular.

9. Construct and reduce Bramantip, Cesare, Falsoko, and a sorites of six propositions with an *O* conclusion.

10. State and explain the fallacies incident to Conjunctive Inferences.

11. What are the laws of Plurative Syllogisms? How should we calculate the probability resulting from several probable arguments combined in a coil, each argument leading to the same conclusion?

12. State Mr. Mill's view of the functions of the syllogism. "It must be granted that in every syllogism, considered as an argument to prove the conclusion, there is a *petitio principii*"?

13. What assumption underlies Material Logic? What is an induction? What is an explanation? When may we consider a co-existence a law of nature? What is a *kind*?

14. Define the *logical* relation of cause and effect; substance and quality; identity and difference.

What fallacies are connected with Plurality of Causes?

15. What is the peculiar character of the Method of Difference? "The indirect method [or Double Method of Agreement] is continually employed by us in the ordinary affairs of life? The Method of Co-Variations "is really a peculiar application of the Method of Difference"? The Method of Residues is "the most fertile in unexpected results"?

16. Criticize:—"Any argument from known points of agreement to unknown is an inference of analogy, and induction is no more."

17. What is Verification? What is an Empirical Law?

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amination.

18. Examine:—

- (1.) Few students can excel in many branches; such as so excel are worthy of high commendation; . . . few students are worthy of high commendation.
- (2.) This man is honest, for he attends to his business, as all honest men do.
- (3.) No cat has two tails; every cat has one tail more than no cat; . . . every cat has three tails.
- (4.) All the hottest months are May, June, July, and August; each of these months has no R; . . . all the hottest months are without an R in their names.

GEOLOGY AND PHYSICAL GEOGRAPHY.—*Examiner, Dr. Cunningham.*

1. What are the principal ores of lead and tin? With what strata are they chiefly associated? Mention some of the more important lead and tin mines.
2. Describe the principal varieties of mica and of feldspar.
3. State the composition and crystalline form of spinelle, and mention other minerals of similar composition and the same crystalline form.
4. State the leading divisions or sub-groups of the Devonian strata as met with in Great Britain and Ireland.
5. Give the principal localities in Great Britain and Ireland where Permian rocks occur, and mention the names of a few characteristic Permian fossils.
6. In what strata do we first meet with (1) the remains of Mammals; and (2) the remains of Reptiles (excluding Amphibia)?
7. Give the names of some of the genera of Cephalopoda characteristic (1) of Palaeozoic; and (2) of Mesozoic strata.
8. Where does the Speeton clay occur, and to what geological formation does it belong?
9. What are those circumstances which are principally conducive to an excessive ruin-fall?
10. In what region of the world do Monsoons occur, and how are they produced?

ZOOLOGY.—*Examiner, Dr. Cunningham.*

[Junior Students omit questions 5 and 10. Senior Students omit questions 1 and 6.]

1. Explain and give examples in illustration of the following terms:—analogue, homologue, individual, zo-oid, commensalism, transformation, metamorphosis.
2. State the characters of the orders of Infusoria.
3. Briefly state the characters of the sub-classes and orders of Hydrozoa.
4. State the main characters by which Ophiuridea, Asteroidea, Crinoidea, Echinoidea, and Holothuroidea are distinguished.
5. Describe the development of a Distoma from the egg to the perfect stage.
6. State the constitution of a typical vertebra.
7. Give a brief account of the circulation in an ordinary fish.
8. Give an outline of the classification of Amphibia.
9. State the characters of the principal groups of Natatorial Birds.
10. Mention the names and characters, and give examples of the principal families of Rodentia.

THIRD YEAR STUDENTS.

ENGLISH LAW.—*Examiner, James O. Wylie, M.A., LL.B.*

COMMON AND CRIMINAL LAW.

*Appendix,
No. 2.*

General
Class Ex-
amination.

1. Explain fully, and with the necessary limitations, the doctrine of "Merger" as applicable to *judgments* and *contracts under seal*. (1) In case of a single debtor. (2) In case of joint debtors.
2. What is meant by an "Estoppel"? Into what three classes are Estoppels divided? How do they differ as regards *pleading*? Give an example of each class.
3. What is meant by a *past consideration*? When will it support an action in the absence of an *express* previous request?
4. How does a *warranty* differ from a *fraudulent representation*? A. sold to B. a silver *plated* jug and warranted it *solid* silver. A. *knew* it was *not* solid silver. B. took the jug and paid the price. In what several ways may B. proceed against A.?
5. What is meant by "Privity"? Show by an example the distinction between *contract* and *tort* as regards *privity*.
6. Explain clearly the meaning of a *guarantee* within the 4th Section of the Statute of Frauds. What are the provisions of that Statute with regard to it? How were they afterwards evaded, and what statutory enactment was passed in consequence? How far does the 19 and 20 Vict. c. 97 alter the previous law with regard to a *guarantee*?
7. What were the requisites of a valid sale of goods at common law? What under the 17th Section of the Statute of Frauds? What is the precise effect of a mere contract of sale (1) of lands; (2) of goods?
8. How may a contract under seal be discharged (1) before breach and (2) after breach? How may a simple contract? If the general rule in any case have any exception, state it.
9. What in general must the holder of a bill prove in an action against the *drawer* in order to sustain his action? What in an action against an *indorser*? If there be an exception to the general rule in either case, state it.
10. A. contracts in *his own name* with B., but *really* as *agent* for C., who afterwards becomes known as principal. What are the rights of A., B., and C. respectively as plaintiff or as defendant?
11. When will A. be liable on a *warranty* given by B. contrary to A.'s express directions? When can A. be made liable for a tort committed by B.?
12. What are the exceptions to the rule, that *parol evidence* is not admissible to explain, add to, or vary, a written contract?
13. Define "*libel*." What must be proved in order that an action for libel may be sustainable? What is meant by words being "*actionable per se*"? When are they so actionable?
14. How far are infants, married women, and persons labouring under insane delusions, criminally responsible? On what principle are they exempted from responsibility in certain cases?
15. What is the true test for determining whether an equitable plea in an action at law is a good plea? A. sues B. upon a contract. B. pleads infancy. A. replies a *fraudulent representation* by B. that he was of full age. Is the replication good?
16. Distinguish clearly between *larceny*, *embezzlement*, and obtaining goods under false pretences. To what false pretences is the offence limited? Are all three offences of the same degree? What is the law, if, where a person is indicted for *embezzlement*, the offence turn out to be *larceny* or "*false pretences*," and vice versa?

Appendix,
No. 8.

LAW OF PROPERTY AND CONVEYANCING.

General
Class Ex-
amination.

1. What are the usual incidents of a tenancy for life? What powers of alienation has a tenant for life at Common Law or by Statute?

2. What is an estate *per autre vie*? Who becomes entitled to it at the death of the owner?

3. What are the several kinds of estates tail? How and to what extent could a tenant-in-tail dispose of the estate before the "Fines and Recoveries Abolition Act," and since; (1) when in possession; (2) when in remainder?

4. A., a tenant for lives renewable for ever, conveyed his estate to B. and the heirs of his body, remainder to C. and his heirs; B. renewed the lease, then devised the estate to D., and died, leaving C. and D. surviving. Who became entitled to the estate?

5. A., having purchased Blackacre in fee, dies intestate, leaving B. his heir-at-law; B. dies intestate leaving a paternal aunt and a paternal grand-uncle his sole surviving kindred. Who is entitled to the estate? Give your reasons fully.

6. What specially distinguishes a joint tenancy from a tenancy in common? A., B., and C. are joint tenants in fee; A. releases his share to B.; B. dies intestate leaving D. his heir-at-law. Who are entitled to the estate? Supposing B. had devised all his real estate to E., how would the estate have devolved?

7. A. devises Blackacre to his two sons B. and C. and the heirs of their bodies, and dies; then B. dies, having devised all his real estate to D.; then C. dies intestate. How does the estate devolve on the death of B. and C. respectively?

8. Explain shortly each of the following modes of conveyance:—Feoffment, Lease and Release, Bargain and Sale. How did each operate to transfer the legal estate?

9. Conveyance to A. and his heirs, to the use of B. and his heirs, to the use of C. and his heirs, in trust for D. and his heirs. What are the rights of the parties?

10. A. being seised in fee, bargained and sold to B., to the use of C. What are the rights of B. and C.? What quantity of estate passed by the bargain and sale?

11. A. being possessed of real and personal estate desires to vest it in himself and his son jointly. How could this have been done at common law? How can it now be done, and under what statutes?

12. State shortly the provisions of the Wills Act with regard to the execution and attestation of wills. In what respects did that Act alter the previous law? What becomes of an estate devised to one of two witnesses to a will?

13. A. has a general power of appointment over Blackacre in fee, which in default of appointment is settled on A.'s eldest son. He has also a special power of appointment over Whiteacre in fee, in favour of any of the children of B. (a stranger), who take equally in default of appointment. A. duly appoints by will Blackacre, to C., and Whiteacre to D. (B.'s eldest son). A. afterwards marries, and dies, leaving C., D., and E. (A.'s eldest son) surviving. How do the estates devolve?

14. What was the law, prior to the Wills Act, as to lapsed devises—(1) as to when they lapsed; (2) as to how they devolved after lapse? How far was this law altered by the Wills Act?

15. A. bequeathed a term of 1,000 years to B. for life, and in default of issue to C.; A. died in 1834; B. entered into possession, and died intestate, leaving no issue, and leaving C. surviving. Who is entitled to the term?

16. A. and B. married in 1860. Each was entitled to freehold property and chattels real. State shortly the actual or possible rights of each in the property of the other. Suppose they married in 1872, what effect would that have upon their rights? Appendix,
No. 2.
General
Class Ex-
amination.

17. State accurately the "Rule in Shelly's Case." Blackacre is limited to the use of B. and his heirs, during the life of A., in trust for A. for life, remainder to the use of the heirs of A. A. conveys the estate in fee to C., and dies. Who is entitled to the estate?

18. How were contingent remainders usually destroyed at common law? How far exactly was their liability to failure lessened by the 8 and 9 Vic., c. 106?

19. Define an executory interest. How does it differ from a contingent remainder?

20. State accurately the "Rule against Perpetuities."

- (a.) Limitation to A. and his heirs, and in default of issue of B., to C. and his heirs.
- (b.) Limitation to A. for life, and in default of issue to C. and his heirs.
- (c.) Limitation to A. and the heirs of his body, and in default of issue to C. and his heirs.
- (d.) Limitation to A. for life, and 21 years and 9 months after his decease to C. and his heirs.

Which, if any, of the above limitations to C. are good?

SECOND YEAR STUDENTS.

EQUITY.

1. Exemplify the following maxims of Equity:—

- (a.) Equity follows the law.
- (b.) Equality is Equity.
- (c.) Equity treats that which ought to be done as already done.

2. State accurately but generally the test for determining whether assets are *legal* or *equitable*. How does this distinction affect simple contract creditors?

3. In what order are the assets of a deceased person administered? A. died in 1867, having by his will charged all his real estates with payment of his debts. He left personal estate amounting to £1,000, and real estate of the value of £2,000. His only debts were specialties amounting to £2,000, and simple contract to £4,000. How will the assets be applied?

4. What are the exceptions to the rule, that the general personal estate is primarily liable to the payment of debts? State fully the effect of any recent statutes on the point.

5. State generally the doctrine of "marshalling." What are the rights of specific legatees in the following cases, where the creditors have exhausted the personalty and

- (a.) Lands have descended to the heir-at-law?
- (b.) Lands have been devised charged with debts?
- (c.) Lands have been devised not charged?

6. Wherein does a demonstrative legacy differ from, and wherein does it resemble, (1) a specific legacy; (2) a general legacy? A. bequeathed to B. £400, payable out of his 3 per cents, and to C. £600. A. died,

Appendix,
No. 6.General
Class Ex-
amination.

leaving 3 per cents. amounting to £300, and other personalty amounting to £350. What are the rights of B. and C.?

7. State generally the equitable doctrine of "satisfaction." On what is it founded? How does the Court lean as to the satisfaction, (1) of a portion by a legacy? (2) of a legacy by a portion? (3) of a debt by a legacy? And what is the practical effect of such leaning? Does any difference arise in the application of the doctrine in cases (1) and (3)?

8. State accurately the equitable doctrine of "election." A. bequeathed a fund to such of C.'s children as C. shall appoint. B. bequeathed a fund to the children of C., in such shares as C. shall appoint, and in default of appointment, equally. C. dies, leaving three children, x., y., z., having, by his will, appointed the first fund to x., and the second fund to y. and z. What are the rights of x., y., and z.?

9. A., being seized in fee of Blackacre, makes a valid contract with B. for the sale of it for £5,000. No conveyance is executed, and no money is paid. A. and B. die intestate, each leaving a son and a daughter, and B. left personalty amounting to £10,000. What are the rights of the parties entitled?

10. A., being seized in fee of Blackacre and Whiteacre, devised the former to B., his eldest son, and the latter to C., upon trust to sell and divide the proceeds equally between his only other children, E. and F. A. died in 1840, E. and F. died in 1833, G. leaving no issue, F. leaving G., a son. B. died in 1841, intestate, leaving H., a son, and K., a daughter. What are the rights of G., H., and K.? What if A. had died in 1835?

11. What is meant by a married woman's "Equity to a settlement"? On what principle is it founded? Out of what property is it claimable? Against whom is it binding? Wherein does it differ from her "right by survivorship"? In what respect has the law been recently altered with regard to her "right by survivorship"?

12. Real and personal estate is vested in trustees to the separate use of B., a married woman. She binds herself by bond to C., in a sum of £200. C. files a bill in Equity against her. What decree would be made in such a case? Suppose B. were restrained from anticipation, what security would C. have?

FIRST YEAR STUDENTS.

JURISPRUDENCE.—*Examiner, Professor Leslie.*

1. Trace the changes in the law of succession (intestate and testamentary) in Roman legal history.

2. Trace the changes in the law of succession (intestate and testamentary) in English legal history.

3. Explain the origin and nature of equity in Roman jurisprudence.

4. Explain the origin and nature of equity in English jurisprudence.

5. Speaking of medieval law, Sir H. Maine says,—*Ancient Law*, p. 157—"The law relating to women carries the stamp of its double origin." Explain this.

6. Compare and contrast the *Twelve Tables* with Justinian's *Corpus juris*, in respect of the objects and nature of the codification effected in each case.

7. Explain the origin of the English law of primogeniture.

8. "Modern International Law, undoubted as is its descent from

Roman Law, is only connected with it by an irregular filiation."—*Ancient Law*, p. 99. Explain this.

9. "If sovereignty had not become territorial, three parts of the Grotian system would have been incapable of application."—*Ancient Law*, p. 112.

10. State the chief arguments for and against trial by jury.

11. State the chief arguments for and against the rule of unanimity of the jury.

12. Explain the principles which, according to Bentham, ought to govern the number and distribution of tribunals.

13. A. purchases a fee-simple estate in the name of B., his wife, C., his eldest son, and D., a nephew, and dies intestate, leaving B., C., and D. surviving. What are the rights of B., C., and D. to the property?

14. A. being seised in fee of Blackacre and Whiteacre, by B.'s marriage settlement, settles the former to the use of B. for life, remainder to such uses as B. shall appoint by deed or will, and, in default of appointment, to the use of C. and his heirs; the latter he settles to the use of B. for life, remainder to the use of such of B.'s children as B. shall appoint, and, in default of appointment, to the use of C. and his heirs. B., by will, appoints both estates to his eldest son, D., for life, remainder to D.'s eldest son in tail, remainder over. B. dies, then D. dies, leaving E, his eldest son, and C. surviving. What are the rights of E. and C.?

15. When, and in favour of what persons, will equity aid the defective execution of a power? Will it aid in any or all of the following cases?

- (1.) A. under a power of appointment, by deed, appoints by will to B., his nephew.
- (2.) A. under a power of appointment, by will, appoints by deed, to B., his son.
- (3.) A. under a power of appointment, by will, to be attested by 3 witnesses, appoints by will, duly executed according to the Wills Act.

16. Distinguish between a fraudulent execution and an excessive execution of a power. A. has power to appoint £1,000 between B. and C.

- (1.) He appoints to B. £800, and to C. £400, in pursuance of an agreement with B., that B. should pay part of A.'s debts, C. knows nothing of the agreement.
- (2.) He appoints to B., C., and D. in equal shares. What is the effect of the appointment in each case?

17. A., B., and C. purchase an estate for £10,000, and take a conveyance to them jointly. (1) A. pays £5,000, B. £3,000, and C. £2,000. (2) A., B., and C. advance the money equally. What are the rights of A., B., and C. at law and in equity in both cases? What if they had been joint mortgagees instead of purchasers?

SECOND YEAR STUDENTS.

JURISPRUDENCE AND CIVIL LAW.—*Examiner, Professor Leslie.*

1. What are the chief differences between the Roman and the English law of inheritance *ab intestato*?

2. What are the chief differences between Roman and English equity?

3. Is there any recognition, explicit or implicit, in Roman law, of the rights termed by Blackstone "absolute rights of persons"?

Appendix,
No. 2.

General
Class Ex-
amination.

4. Explain the terms *specific legacy*, *specific performance*, *fungibles*.
5. Explain the terms *manucupatio*, *bona vacantia*, *in jura cessio*, *cogdy-
tensis*.
6. Explain and comment on the following: *jus privatum tripartitum
est, collectum est enim ex naturalibus praeceptis aut gentium aut civilibus.*—
INSITT. i. 1, 4.
7. What is the effect of a legacy to a witness to the will in Roman
and English law respectively?
8. Explain the meaning of the term *dominium* as opposed to *obligatio*,
servitus, *possessio*, *testatus*, *monens*, and *manucupium*.
9. Classify and arrange the chief heads of private law, according to
the Institutes.
10. Classify and arrange the chief heads of private law according to
Mr. Austin's plan.
11. Prior to Justinian, what conditions were requisite to convert
possession into *dominion*?
12. Classify Roman contracts.

THIRD YEAR STUDENTS.

POLITICAL ECONOMY.—*Examiner, Professor Leslie.*

1. In a new country in which a title is exacted, show how title and
rent respectively will advance with the progress of population.
2. State the Malthusian doctrine of population, and point out the
bearings of Emigration on its practical truth.
3. State and comment on Mr. Mill's doctrine—
 - (1.) Respecting the equality of the rates of profit in different
employments.
 - (2.) Respecting the conditions determining the general rate of
profit.
4. How would the abolition of protective duties affect the prices of
agricultural and manufactured produce respectively—
 - (1.) In a country exporting only agricultural produce?
 - (2.) In a country exporting only manufactures?
5. Explain and comment on Mr. Mill's doctrine, that a demand for
commodities is not a demand for labour.
6. Explain the notion of demand and supply on the prices of things
permanently or temporarily limited strictly as respects supply.
7. What is a commercial crisis? What are its causes? What is the
cause of the great demand for bank notes during such a crisis?
8. Explain the causes determining the amount of coin required in
different stages of economic progress.
9. Can an inconvertible currency be so regulated as not to exceed in
amount, nor fall in value below a convertible currency?
10. What is the limit to the premium on Foreign Bills of Exchange,
and why?
11. Explain the effects—
 - (1.) Of an *ad valorem* duty on all commodities.
 - (2.) Of a tax of so much per cultivated acre.
12. Explain the effects—
 - (1.) Of a tax in proportion to the ground rent of houses.
 - (2.) Of a tax of so much per square foot on building ground.

THIRD YEAR STUDENTS.

Appendix,
No. 2.

ENGLISH LITERATURE.—*Examiner, Professor Yonge.*

General
Class Ex-
amination.

1. Give a brief account of the History of the British Drama down to the close of the Eighteenth Century.

2. Write notes on the following passages :—

There, where your argosies with portly sail,—
Like signiors and rich burghers of the flood,
Or, as it were, the pageants of the sea,—
Do overpeer the petty traffickers,
That curt'sy to them, do them reverence,
As they fly by them with their woven wings.
If I can catch him once upon the hip.

By this scimitar,
Which slew the Sophy, and a Persian prince,
That won three fields of Sultan Solyman,—
I would out-stare the bravest eyes that look.
Nor thrust your head into the public street,
To gaze on Christian fools with varnish'd faces.

The patch is kind enough, but a huge feeder.

That if again this apparition come,
He may approve our eyes and speak to it.

King. But now my cousin Hamlet and my son.
Hamlet (aside). A little more than kin and less than kind.

So excellent a king : that was to this
Hyperion to a Satyr. So loving to my mother
That he might not betwixt the winds of heaven
Visit her face too roughly.

In the dead vast and middle of the night.

But do not dull thy palm with entertainment
Of each new-hatched, unfledged comrade.

But tell

Why thy canonized bones, hearsed in death,
Have burst their cerements.

Or,

If the assassination

Could trammel up the consequence : and catch
With his surcease, success. That but this blow
Might be the be-all and the end-all here.

But here, upon this bank and shoal of time
We'd jump the life to come.

The sightless couriers of the air.

Now witchcraft celebrates

Pale Hecate's offerings : and wither'd murder,
Alarum'd by his sentinel the wolf,
Whose howl's his watch, thus with his stealthy pace,
With Tarquin's ravishing strides, towards his design
Moves like a ghost.

Thither Macduff

Is gone to pray the holy king, on his aid
To wake Northumberland, and holy Siward,

Appendix,
No. 3.

General
Class Ex-
amination.

3. Give an account of Milton's life, and principal writings, both in verse and prose.

4. Describe the characters which, in the second book of *Paradise Lost*, Milton assigns to Moloch, Belial, and Beelzebub. Do any of them seem imitations of characters in Virgil?

Or,

In Pope's *Satires* and *Epistles* name some of the eminent men to whom he alludes, especially those of whose friendship he boasts, quoting (if possible) his own lines, and explaining the specific allusions.

5. What is the plan of Gray's *Bard*? How far and in what parts has he imitated any book of the *Æneid*?

Or,

What mention in the 3rd or 4th book of *Childe Harold* does Byron make of Napoleon, Sylla, Cromwell, Rieuzy, Cicero, Horace, Gibbon, and Voltaire?

6. Who was the Scotch king mentioned in *Marston*? What were the circumstances of the battle of *Flockton*? Who is alluded to in the lines—

The fair Queen of Franco
Sent him a turquoise ring and glove.

Or,

Give an analysis of any of the *Four First Idylls of the King*.

7. Give a brief analysis of Dr. Johnson's comparison between Dryden and Pope.

Or,

Explain the reasons, so far as they appear in his *Reflections*, which led Burke from the first to augur ill of the French Revolution.

SUBJECT FOR ESSAY.

Give an analysis of Macaulay's Essay on Sir W. Temple.

Or,

Give a sketch of the Rise and Progress of our Indian Empire so far as it is portrayed in Macaulay's two Essays on Clive and Hastings.

HISTORY.—*Examiner, Professor Yonge.*

1. What was the feudal system as introduced into England by William I., and how far was it a novelty in the country?

2. Give an account of the chief provisions of *Magna Charta*; explaining how far the English people had been accustomed to the idea of a Charter.

3. Relate the story of Arthur, Duke of Brittany.

4. Trace the origin of the British Parliament.

5. Mention the most important transactions which affected the relations of England towards Scotland in the reigns of Stephen, Richard I., Edward I., Edward III., Henry IV., and Henry VII.

6. Give some account of the battles of Brun, Lewes, Evesham, Falkirk, Bannockburn, Shrewsbury, Verneuil, Wakefield, Barnet, Towton, Bosworth.

7. What were the Constitutions of Clarendon, and the Statute of Provisors?

8. What wars were carried on in England at any time between the years 1066 and 1509 that can be called Civil Wars? Relate the leading circumstances of each.

Or,

1. What were the principal causes (avowed or concealed) which led to the quarrel between Charles I. and the Parliament?
2. Give a brief summary of the most important events which took place in England between September 1, 1658, and June 1, 1660.
3. What were the Petition of Right, the Declaration of Right, and the Bill of Rights?
4. Describe the objects of, and the debates upon, the Exclusion Bill, the Peerage Bill, and the Regency Bill.
5. What were the chief principles of the policy of Henry IV. of France; and how far, especially in respect of foreign affairs, were they adopted by succeeding sovereigns?
6. Relate the most important events in the history of the French Parliament in the early part of the reign of Louis XIV., in the latter years of the reign of Louis XV., and in that of Louis XVI.
7. What was La Panette, La Gabelle.
8. Give some account of Sully, Richelieu, Colbert, Louvois, Turgot, Necker.

*Appendix.
No. 4.
General
Class Ex-
amination.*

SUBJECT FOR ESSAY.

A Comparison between the English Rebellion of 1642 and the French Revolution of 1789.

Or,

A Comparison between the Scotch war of Edward I. and the French war of Edward III., with reference to their justice, their policy, their immediate results, and their subsequent influence on the history of the nation.

THIRD YEAR STUDENTS.

METAPHYSICS.—*Examiner, Professor Park, M.A.*

1. Show that a science of the human mind is possible. Mr. Herbert Spencer remarks—"It is a vice of the older psychology, and of the Kantian psychology included, that it habitually deals only with the consciousness of the adult." By what modes do Sir W. Hamilton and Mr. J. S. Mill attempt to ascertain the original elements of mind? Are all general truths inductions?

2. Explain—"A psychological dualism is involved in the very notion of consciousness."

"To assert that a representation is *untrue* because it is relative to the mind of the receiver, is to overlook a fact."

"The primordial sense of difference is the most rudimentary of all the properties of our intellectual being."

3. In what sense does Mr. Spencer accept the doctrine of "forms of intuition"? What does he suggest as "the only possible reconciliation between the experience hypothesis and the hypothesis of the transcendentalists"? How does he account for the fact that a horse is not as educable as a man?

4. How may we explain "the apparent paradox . . . that consciousness must have had a beginning in time, and that it is only possible under

Appendix,
No. 2.

General
Class Ex-
amination.

the form of a change of state" ? Examine Sir W. Hamilton's argument from the *minimum sensible*, and Mr. Mill's criticism of it.

5. Enumerate the various meanings attached to the following expressions :—(a) the true objects of the bodily senses ; (b) each sense is a modification of touch ; (c) the subjective and the objective element of a sensation.

6. Explain and examine :—

(a) "The presented object of vision is a flat surface, inverted, and double."

(b) "In every act of sensation we are conscious of our own organism as extended or occupying space."

(c) "The primary qualities of body are not, properly speaking, known by sense, but by intellect."

(d) "The power of locomotion is not a fact of consciousness at all."

(e) A sensible body is a complex uniformity.

7. On what circumstances depend the comparative revivabilities of our feelings ? What are the limits of ideation ?

8. State the laws that underlie these phenomena :—

(a) "We cannot help seeing the moon larger when near the horizon, though we know that she is of precisely her usual size. We cannot help seeing a mountain as nearer to us and of less height when we see it through a more than ordinarily transparent atmosphere."

(b) "When he first sees an operation, a student not infrequently faints from sympathetic pain ; he gradually becomes less sensitive."

(c) "The fishes in the tropical seas are without the sensation of warmth."

(d) "The appreciation of a delicate taste is hindered when the palate has just been excited by a very strong taste."

(e) "In learning a new language, it is much easier to translate from it into the native one than back again."

(f) "The miser shows us how the desire of possession in the abstract may become almost independent of those from which it arises, and may exceed in strength any of them individually."

(g) "I have met with [English] persons who could understand more of what they read in Latin or French than in English."

9. "What is the manner of occupation of the brain with a resuscitated feeling" ? What is Dr. Bain's "distinction between the constructions of imagination and the constructions of science and practice" ? What is plot-interest ?

10. What facts justify belief in an Ego ? Explain—(a) "I ascribe a reality to the Ego—to my own mind—different from that real existence . . . I acknowledge in Matter."—*J. S. Mill*.

(b) "Ontology in the highest sense of the term becomes identical with Psychology."—*Dean Mansel*.

11. What is the distinction between knowledge and belief ? Examine Dr. Bain's assertion—"The essence or import of belief is such as to place it under the region of the will." State any other theories of belief that you remember.

12. In what ways does the power of the will combine with the intellectual forces of reproduction ? What is Spontaneous Activity ? Why is it that in the acquisition of our native tongue "more is done by the nurse imitating the child than by the child imitating the nurse" ?

1. Describe briefly the instances, the idols, and the historical import of Francis Bacon; or State the leading ideas of the Cartesian system. Appendix, No. 8.

2. How do Spinoza, Locke, Berkeley, Leibniz, and Mansel explain the origin and the import of our idea of *substance*? General Class Examination.

3. How do Hume, Kant, Sir W. Hamilton, and Mr. J. S. Mill explain the origin and the import of our idea of *causation*?

4. Show that "every perception involves more or less of representation," and that "language is indispensable, not merely to the communication, but to the formation of thought."

5. What are, according to Dean Mansel, the characteristics of concepts? What is his distinction between intuitions and thoughts, sensations and perceptions, the muscular sense and the locomotive faculty, intuitive and reflective remembrance?

6. Examine—

(a.) "When my fingers are cold, upon holding them to the fire I shall find them grow warm: if then I have neither fingers nor fire, how comes it that I feel a real warmth from an imaginary fire? If I have neither mouth nor meat, how comes it that I taste the savour of visionary roast beef?" "There is no conceiving any relation between impulse and thought, nor what connexion the modifications of body can have with the perceptions of spirit; therefore, Berkeley denied the existence of bodies."—*A. Tucker.*

(b.) "The great fault of the system of Berkeley, therefore (besides his denial of space) consists in this, that instead of recognising our *sensations* for affections or certain states of our mind, superinduced by the *energies* of some *unperceived external Power*, he supposed these sensations to be *permanently-existing detached beings*, which flit, like swallows, into and out of our mind."—*J. Fearn.*

7. "Kant unquestionably went too far in asserting that things in themselves are not as they appear to our faculties?" How are synthetic judgments possible *a priori*? Would Kant question Hamilton's doctrine—"We know the primary qualities [of body] immediately as objects of perception"?

8. Distinguish the *ethical* from the *psychological* questions of moral philosophy. Explain *motive, intention, disposition, heteropathic state, appetite, and instinct*. Contrast Mr. J. S. Mill's theory of our moral phenomena with that of Mansel or of Dr. J. H. Newman.

HONOR LOGIC.

1. Is logic a science? "This which we call exact science is in reality *quantitative provision* as distinguished from that *qualitative provision* constituting ordinary knowledge?" "Formal logic deals with names, and not with either the *ideas* or *things* to which these names belong?"

2. "The phrase *necessary laws of thought*, if such language is allowable, ought to imply that we cannot think at all except under their conditions; and yet it is notorious that such laws are daily transgressed, that nothing is more common than illogical reasoning." How do logicians attempt to reconcile the language with the fact?

3. Do "concept" [or "name of concept"] and "common term" mean one and the same thing? "A name may be both collective and common?" What is an abstract name? Distinguish the predicables from the predicamenta.

11. Examine—"Induction is a syllogism in Barbara." "Complete induction is demonstration, and strictly syllogistic in its character." "Throughout a wide range of cases such inductions [founded on solitary instances] are legitimate. When it has been demonstrated of a particular equilateral triangle that it is equiangular, it is forthwith inferred that all equilateral triangles are equiangular." "An hypothesis is an induction in the incipient stage."

12. May we consider the logical conception of causation to be *invariably*, rather than unconditional, sequences? Mr. Mill's five Methods "are called by courtesy Inductive Methods; they are more properly Deductive Methods, available in Inductive investigation"

ANATOMY AND PHYSIOLOGY.—*Examiner, Dr. Redfern.*

[First Year Students are required to answer questions 1, 2, 3, 4, 5; Second Year, 3, 4, 5, 6, 7; and Third and Fourth, 7, 8, 9, 10, 11.]

1. Describe columnar epithelium and the mode of formation of new cells to replace those which fall away.
2. In what textures and for what purposes do nerves end in the skin?
3. Give an account of the structure of non-striated muscle, and of its condition in the uterus before impregnation, during utero-gestation, and after parturition.
4. Give a history of the life of the human blood corpuscles, their modes and places of formation, their adult condition, and their removal from the circulation.
5. Why are certain animals called warm-blooded, and others cold-blooded? How is the animal heat produced and maintained? Indicate the amount of variation of the human temperature under circumstances of health and disease.
6. Describe the general and the microscopical characters of the medulla of bones, with the differences in it in different bones.
7. Give an account of the mode of development of the teeth.
8. Describe the fornix, its position, connexions, relations, and structure.
9. Give an account of the structure and action of a lymphatic gland.
10. Describe the formation of the septum between the auricles of the heart, the characters of the Eustachian valve, and of the foramen ovale, and fossa ovalis; the nature of the foetal circulation through the foramen ovale, and the change which takes place at this spot at the time of birth.
11. Give an account of the structure of the retina, specially indicating the differences in different parts of it both in structure and function.

PRACTICAL ANATOMY.—*Examiner, Dr. Redfern.*

[In addition to making a dissection, First Year Students are required to answer questions 1, 2, 3, 4, 5; Second Year, 5, 6, 7, 8, 9; and Third Year, 7, 8, 9, 10, 11.]

1. Describe the osseous boundaries of the nasal fossa, with the communications of the fossa with sinuses or cells.
2. Give an account of the attachment, insertion, action and relations of the brachialis anticus muscle.
3. Give an account of the position, connexions, and relations of the crura of the diaphragm.

Appendix,
No. 5.
General
Class Ex-
amination.

4. Describe the annular ligaments of the wrist and ankle, and their respective relations to tendons.
5. State the course and relations of the profunda femoris artery, and describe the distribution of its branches.
6. Describe the coraco-clavicular ligaments, and their action.
7. State which phalanges of the hand can, and which cannot be flexed and extended independently of their neighbours, and the anatomical causes of those results in each case.
8. State the successive steps of the dissection of the orbit after the roof has been removed. Each part is to be mentioned in the order in which it is met with, but no description of the parts is required.
9. Describe the course and relations of the thoracic duct.
10. Describe the connexions of the facial with other nerves.
11. Describe the origin, course, the connexions with other nerves, and the distribution of the spinal accessory nerve.

SURGERY.—*Examiner, Dr. Gordon.*

1. Describe the causes, signs, and treatment of the spiral fracture of the tibia.
2. Describe briefly the morbid alterations of the prostate and bladder in the specimens exhibited in the class, as well as the diagnostic signs and treatment of such affections.
3. Describe briefly the differential diagnosis of hydrocele of the tunica vaginalis, and the treatment.
4. Describe the signs and treatment of chronic abscess, mentioning those remedial agents which have a remarkable influence in the prevention of the decomposition of pus and irritative fever.
5. Describe the reduction of the dislocations of the shoulder and hip-joint by manipulation.
6. Describe briefly the constitutional and local treatment of scrofulous adenitis of the neck.

MEDICINE.—*Examiner, Dr. Canning.*

[Second Year Students are expected to confine themselves to the first seven questions,
First Year Students to the last seven.]

1. What morbid conditions may be found in the abdomen in chronic phthisis?
2. Give an account of the symptoms and pathology of locomotor ataxy.
3. Give the signs and causes of pneumothorax.
4. Give the symptoms and diagnosis of amyloid disease of kidney.
5. Give the physical signs of cirrhosis of the lung and its diagnosis from phthisis and dilatation of bronchi.
6. What are the signs and symptoms of acute pericarditis?
7. Give the characters of mitral regurgitant murmur.
8. Give the general and local treatment of diphtheria.
9. What are the usual periods of eruption and crisis in typhus fever?

MATERIA MEDICA.—*Examiner, Dr. J. Seaton Reid.*

*Appendix,
No. 8.*

General
Class Ex-
amination.

1. Name our antiperiodic medicines.
2. Write a prescription for the internal use of each by an adult.
3. In what way, and on what tissue, do astringent medicines act chiefly?
4. How are they classified?
5. Name the chief astringent principle furnished by vegetables, and the substance containing it in largest quantities.
6. How many succi are official in the British Pharmacopœia?
7. Write a prescription for the internal use of each by an adult; and state the ailment you are prescribing it for.
8. What are the therapeutic properties of hydrate of chloral?
9. Write a prescription for its use by an adult.
10. Name the medicines on the table, and classify them therapeutically.

FRENCH.—MEDICAL STUDENTS.—*Examiner, Professor Meissner.*

1. Translate into French :

The city of Carthage was destroyed by the Romans. Many Athenians were banished. They have written several letters to each other. We hoard up riches, as if we were to live for ever. The good qualities of Alexander were those of a great man, and his faults those of a soldier. Our master is not yours. My hands are cold. How far is it from London to Paris? What o'clock is it, sir? It is going to strike six o'clock. You ought to have acted otherwise. I should like to see that. Tell me what you are going to do. Have you not yet returned him his book? We shall return it to him as soon as possible.

II.—I have somewhere read of an eminent person who used, in his private offices of devotion, to give thanks to Heaven that he was born a Frenchman; for my own part, I look upon it as a peculiar blessing that I was born an Englishman. Among many other reasons, I think myself very happy in my country, as the language of it is wonderfully adapted to a man who is sparing of his words and an enemy to loquacity.

- III.—Translate into English :

Nous approchons de la vue de cette grande chute de Niagara, qui était un des objets principaux de notre voyage, que j'avais depuis longtemps le désir extrême de voir, dont chacun de nous se composait dans l'enthousiasme de son imagination, une idée particulière. Chaque coup de rame nous avançait vers elle, et tout entier à l'avidité d'en apercevoir la vapeur et d'en entendre le bruit, nous donnions peu d'attention aux bords de ce fleuve passablement habité du côté de Canada, au cours majestueux de ses eaux, à la vaste largeur de son lit. Enfin, nous avons entendu ce bruit, nous avons vu cette vapeur; le temps n'était pas favorable pour nous donner de bien loin ce charme précurseur; la rapidité du courant qui commence à se faire sentir plusieurs milles avant le lieu même de la chute, nous a bientôt amenés à Chippawa; il faut, un mille avant d'y arriver, ne pas quitter le bord du fleuve; on serait, sans cette précaution, promptement conduit dans les courans, qui entraînent irrésistiblement dans le gouffre tout ce qui les approche; il faut même un grand effort de rames pour remonter le creek de Chippawa, qui donne mon nom au fort.—LAROCHESOUCAUD-LIANCOURT.

Appendix,
No. 2.General
Class Ex-
amination.GREEK.—*Examiner, Professor MacDowall.*

FIRST YEAR STUDENTS.

Translate perspicuously the following extract from the *Electra* of EURIPIDES :—

κλῶν δὲ ταῦτ' Ἀγισθος ἐνὶ στήθεϊ τὰδε·
 " εἴ μιν παρ' ἡμῖν χρηὶ συνίστασθαι ἱμοὶ
 θοίνην ἐλθεῖν· τεγγίω δὲ βοηθεῖν·
 Νόμφας· ἐγὼ δ' ἔκταστας λίχους
 εἰς ταῦτόν· ἦϊτέ· ἄλλ' ἱμεν εἰς δόμους."
 καὶ ταῦθ' ἄμ' ἠγόρευε καὶ χερὲς λιβόων
 παρήγεν ἡρᾶς, οὐδ' ἀπαρνήσθαι παρήν.
 ἔπει δ' ἐν οἴκῳ ἦμιν, ἐνὶ στήθεϊ τὰδε·
 " λούτρῳ ὡς τάχιστα τοῖς ξίυσιν τοὺς αἰρίτω,¹
 ὡς ἄμφι βωμόν στῶσι· χερσὶ βίβαν·² πύλας."
 ἄλλ' εἴπ' Ὀρίστης· " ὀρίσας· ἠγνίσμεθα³
 λουτροῖσι καθαρῶς ποταμῶν ῥέεθρον·⁴ ἄπο.
 εἰ δὲ ξίυσιν ἀσπείσοι συνθῆναι χερῶν,
 Ἀγισθ', ἔτοιμοι κοῦκ ἀπαρνοίμεσθ',⁵ ἴδναξ."
 τοῦτον μὲν σὺν μεθεῖσσαν· ἐν μέσῳ λόγον·
 λέγχας δὲ θύετις ἐσπόμεν φρουρήματα⁶
 ὁμοῖς πρὸς ἔργον πάντες ἴσαν· χίρις.
 οἱ μὲν σφαγίαν ἐφάρην, οἱ δ' ἦρον·⁷ καυῖ,⁸
 ἄλλοι δὲ πῦρ ἀνῆπτον ἄμφι τ' ἰσχυρίης
 λίβητας ὠρόον·⁹ πᾶσα δ' ἐκτόπει·¹⁰ στήγῃ.
 λαβὼν δὲ προχέτας¹¹ ματηρὸς εὐνίτης·¹² οἶθον¹³
 ἐβαλλε βωμόε ταιῶ·¹⁴ ἐνὶ στήθεϊ ἔπη·
 " Νόμφαι περμύσι, πολλὰ δέτε με βοηθεῖν
 καὶ τήν κατ' οἶκον Τυνδαρίδα δόμαρτ' ἱμῖν
 πρᾶσσοντας ὡς σὺν, τοὺς δ' ἱμοὺς ἐχθροὺς κοῦξ·"
 λίγην Ὀρίστην καὶ σὺ. ἐσπότης δ' ἱμὸς
 τάναντ' ἠδχε·¹⁵ οὐ γεγυῖσκα¹⁶ λόγοις,
 λαβὲν πατρίδα δώματ'. ἔκ κοῦξ δ' ἔλῶν
 Ἀγισθος ἐρθὴν σφαγίδα¹⁷ μεσχείαν τρέχα
 τιμὴν ἑφ' ἄγνων πῦρ δέθαι διέξ.

1. Parse accurately and fully every word to which the figure 1 is attached.

2. Derive or decompound every word to which the figure 2 is attached.

3. Explain any construction that may appear noteworthy.

4. Point out all the trisyllabic feet in this passage, remarking how each is made up, and what place in the line each occupies.

SECOND YEAR STUDENTS.

Translate perspicuously the following extract from XENOPHON'S *Memoir of Socrates* :—

Σωκράτης δὲ τὸν μὲν ἀραβίαν·¹ ἔνθα διακρίνοντα δικαίως ἂν καὶ αὐτὸν φέρεο δεδίδεσθαι
 ἐπὶ τῶν ἐπιστατήνων· ἀμὲν αὐτὸς ἐπίσταται·² καὶ τῶν τοιούτων ἔνθα πολλάκις ἐσκόπει
 τί διαφέρει μανίας ἀραβίας· καὶ τοὺς μὲν μαινομένους φέρεο συμφερόντως· ἂν δεδίδεσθαι
 καὶ αὐτοὺς καὶ τοὺς φίλους, τοὺς δὲ μὴ ἐπιστατήνους τὰ ἔκοντα δικαίως ἂν μαθεύουσιν
 παρὰ τῶν ἐπιστατήνων. * * * * * λέγει δὲ ὅτι καὶ ζῶν

ἕκαστος ἑαυτοῦ, ὃ πάντων μάλιστα φιλεῖ, τοῦ σώματος ἢν ἂν ἀρχαῖος⁴ ἢ καὶ ἀνωφελὲς⁵ αὐτὸς τε ἀφαιρῇ⁶ καὶ ἄλλῃ παρέχει. αὐτοὶ τε γὰρ αὐτῶν δευχὰς τε καὶ τρίχας ἀραι-
ροῦσι, καὶ τοῖς ἱατροῖς τύλους παρέχουσι μετὰ πόνων τε καὶ ἀλγυδύνων⁷ καὶ ἀποτρίμνουν⁸
καὶ ἀποκόβουσιν,⁹ καὶ τοῦτον χάριν οἰσται δὲν αὐτοῖς καὶ μισθὸν τίνειν· καὶ τὸ εἶδον ἐκ
τοῦ στόματος ἀποπύουσαι¹⁰ ὡς δύνανται ποτρωτάτω,¹¹ διότι ὠφέλει μὲν οὐδὲν αὐτοῦς
ἰσὺν βλέπει δὲ πολὺ μᾶλλον. ταῦτ' οὖν ἰλεγει, ὅ τὸν μὲν πατέρα ζῶντα κατατρί-
πτει¹² ἐξόσκειν ἑαυτὸν δὲ κατατρίμναι, ἀλλ' ἰποδευκένων ἢ τὸ ἄρρον¹³ ἀτιμὸν ἵσσι.
παρεβάλλει δὲ ἐπιμελεῖσθαι τοῦ ὡς φρονιμώτατον εἶναι καὶ ὠφελιμώτατον, ὅπως, ἴσν τε
ὕπὸ ἀδελφοῦ ἰσν¹⁴ τε ὅτ' ἄλλου τινὸς βεβλήσθαι τιμᾶσθαι, μὴ τῇ οἰκίᾳ εἶναι πιστεύων
ἀμελεῖ,¹⁵ ἀλλὰ περιτᾶται ὅτ' ἂν ἂν βεβλήσθαι τιμᾶσθαι τοῖς τοῖς ὠφελιμὸς εἶναι.

- 1-14. Derive or decompound each of the words thus numbered.
2. Explain the phrases, τοὺς μὲν ἦτο ἂν ἐδεῖσθαι, τοὺς δὲ ἂν μανθά-
νειν, noticing the perfect infinitive in one case and the imperfect in the
other, and also the effect of ἂν upon both.
3. Have we a direct speech (quoted) or an indirect one (reported)
after ἰλεγει δὲ ὅτι?
4. What is the antecedent referred to in ὃ πάντων μάλιστα φιλεῖ?

Retranslate these sentences in the style of XENOPHON :

"How then should he be liable to the charge? Instead of not believing
in the Gods, as was put forward in the indictment, he was conspicuous
above all others in worshipping the Gods; and instead of corrupting the
youths, as his accuser alleged, he was conspicuous in admonishing such
of his associates as cherished evil desires to desist from them, and in
exhorting them to desire that noblest and most magnificent virtue, by
means of which both states and families are directed aright. How, in
acting thus, was he not worthy of the highest honour from the State?"

LATIN.—*Examiner, Professor Nesbitt.*

FIRST YEAR STUDENTS.

1. Translate :

Hæc directa percunctatio ac denuntiatio belli magis ex dignitate
populi Romani visa est, quam de foederum iure verbis disceptare, cum
ante, tum maxime Sagunto excisa. Nam, si verborum disceptationis res
esset, quid foedus Hasdrubalis cum Lutatii priore foedere, quod mutatum
esset, comparandum erat? cum in Lutatii foedere diserte additum esset,
'ita id ratum fore, si populus censuisset?' in Hasdrubalis foedere nec
exceptum tale quicquam fuerit, et tot annorum silentio ita vivo eo com-
probatum sit foedus, ut ne mortuo quidem auctore quicquam mutaretur.
Quamquam et, si priore foedere staretur, satis cautum erat Saguntinis,
sociis utrorumque exceptis. Nam neque additum erat, 'his, qui tunc
essent,' nec, 'ne qui postea adsumerentur.' Et cum adsumere novos
liceret socios, quis æquum censeret, aut ob nulla quæquam merita in
amicitiam recipi? aut receptos in fidem non defendi? tantum ne Cartha-
ginienſium socii aut sollicitarentur ad defectionem, aut sua sponte
deserentes reciperentur.—LIVY, xxi, 19.

2. Hannonis cis Iberum provincia erat: eum reliquerat Hannibal ad
regionis eius praesidium. Itaque priusquam alienarentur omnia, obviam
eundem ratas, castris in conspectu hostium positis, in aciem eduxit.

Appendix,
No. 8.General
Class Ex-
amination

Nec Romano differendum certamen visum: quippe qui sciret, cum Hannone et Hasdrubale sibi dimicandum esse, malletque adversus singulos separatim, quam adversus duos simul rem gerere. Nec magis certaminis ea dimicatio fuit. Sex millia hostium caesa, duo castra cum praesidio castrorum. Nam et castra expugnata sunt, atque ipse dux cum aliquot principibus captus: et Cissia, propinqua castris oppidum, expugnatur. Ceterum praeda oppidi parvi pretii rerum fuit, suppellex barbarica ac vilium municipiorum. Castra militem ditavere, non eius modo exercitus, qui victis erat, sed et eius, qui cum Hannibale in Italia militabat, omnibus fere caesis rebus, ut gravia impedimenta ferontibus essent, citra Pyrenaeum relictis.—*Ibid.*, 60.

Write short notes on the following:

(a.) *Excisa Sagunto*—exceptum facit—Muguntinis castrum erat—si foddere staretur—tantum ne . . . reciperentur. (b.) *praeusquam alienarentur*—quippe qui sciret—vilium municipiorum.

3. His tandem aliquando, quo te huc prius ista tua cupiditas effrenata ac furiosa rapiebat. Neque enim tibi haec res adfert dolorem, sed quamdam incredibilem voluptatem. Ad hunc te mentium natura peperit, voluntas excrevit, fortuna servavit. Numquam tu non modo otium, sed ne bellum quidem nisi nefarium concupis. Nactus es ex perditis atque ab omni non modo fortuna, verum etiam spe derelictis confidam improborum munus. Ille tu qui laetitia perfrui? quibus gaudiis exultabis? quanta in voluptate incedere, quam in tanto numero tuorum neque audies virum bonum quonquam neque videbis? Ad huius vitae studium molitanti illi sunt qui feruntur labores tui, incerta lumen non solum ad obediendum stuporem, verum etiam ad finem obeundum, vigilare non solum insipientem somno maritorum, verum etiam bonis otiosorum. Habes ubi ostentes hunc illum praedaram patientiam fumi, frigoris, inopiae rerum omnino, quibus te brevi tempore confectum esse senties. Tantum profici tui, quam te a consilio repelli, ut exul potius temptare quam consul vocari rem publicam posses, atque ut illi, quod est a te scelus inceptum, atrocissimum potius quam bellum nominaretur.—*Cic.*—*Cat.*, i., 10.

4. Horum hominum species est honestissima: sunt enim locupletes: voluntas vero et animus impudentissimus. Tu agris, tu melioribus, in argento, tu familia, tu rebus omnibus ornatus et copiosus sis et dubites de possessione detrudere, adquirere ad fidem? Quid enim expectas? bellum? Quid ergo? in vastatione omnium tuas possessiones sacrosanctas futuras putas? An tabulas novas? Errant qui istas a Catillum expectant: in eo beneficio tabulae novo proferantur, verum auctionariae. Neque enim isti, qui possessiones habent, alia ratione ulla salvi esse possunt. Quod si maturius facere voluissent neque, id quod stultissimum est, certare cum usuris fructibus praediarum, et locupletioribus his et melioribus civibus uteremur. Sed haec homines minime puto pertimescentes, quod aut deduci de sententia possunt aut, si percontabunt, magis mihi videntur vota facturi contra rem publicam quam arma latari.—*Ibid.*, ii., 8.

(a.) Give the principal tensions of rapio, adfero, pario, concupio, nanciscor, perfruo, sentio, repello, detraho, adquire.

(b.) What is noteworthy in the use of "meditanti?"

(c.) Nunquam non modo otium, sed ne bellum quidem nisi nefarium concupis.

Id ne unquam posthac non modo non confici, sed ne cogitari quidem possit a civibus, providendum est.

Compare the form of expression in these two sentences, and state with accuracy the use of "non modo." Appendix,
No. 8.

(d.) "An tabulas novas!" Explain and adduce any historical instances of "tabulae novas" you may remember. General
Class Ex-
amination.

(e.) An leges quae de civium Romanorum supplicio rogatae sunt.

Mention, with dates, the laws referred to.

Translate into Latin prose :

Pass.

But Tarquinius was in great favour with the people ; and when he desired to be king, they resolved to choose him rather than the sons of Ancus. So he began to reign, and he did great works both in war and peace. He made war on the Latins and took from them a great spoil. Then he made war on the Sabines, and he conquered them in two battles, and took from them the town of Collatia, and gave it to Egerius, his brother's son, who had come with him from Tarquinius. Lastly, there was another war with the Latins, and Tarquinius went round to their cities and took them one after another ; for none dared to go out to meet him in open battle.

Honors.

The recovery of Richard was slow, and he remained for many days after all danger was passed, in a state of languor which unfitted him for active exertion. In the meantime, however, his troops were not idle ; his great military engines plied the walls night and day. It would appear, not only that the discharge of the English engines was more skilfully conducted, but that the engines themselves were much more powerful than those who had been employed previous to Richard's arrival. They would carry, we are told, the heavy stone-shot, which Richard had brought as ballast from Messina, into the very interior of the market-place of the city. The king of England was still in a state of great weakness, when he was found present at the spot where his engines were erected, directing their aim, and causing others to be constructed. Among the rest was a vast machine with many stages, which had been pushed very near the walls. To its shelter Richard caused himself to be conveyed on silken cushions, and taking a cross-bow from one of the archers, he employed himself in discharging it at every Saracen who appeared on the walls.

Additional for Honors.

A. 1. Translate, with short explanatory notes :

Semina vidi equidem multos medicare serentes
Et nitro prius et nigra perfundere amurca,
Grandior ut fetus aliquis fallacibus esset
Et, quamvis igni exiguo, properata maderent.
Vidi lecta diu et multo spectata labore
Degenerare tamen, ni vis humana quotannis
Maxima quaeque manu legeret : sic omnia fatis
In peius ruere ac retro sublapsa referri,
Non aliter, quam qui adverso vix flumine lumbum
Remigiis subigit, si brachia forte remisit,
Atque illum in praeceps pronos rapit alveus amni.

Ving.—Geor. i., 193-203.

Appendix,
No. 3.
General
Class Ex-
amination.

An memorem portus Laciniaeque addita claustra,
Atque indignantis magnis stridoribus arripior,
Iulia qua ponto longo sonat unda refluxo
Tyrrhenusque fretis immittitur aestus Avernus?
Haec cadent argentâ rivos aetrique metalla
Ostendit venis, atque auro plurima fluxit.
Haec genus aere virum, Marcos patremque Sabellum,
Adversatamque ualeo Ligerem, Volusque veruleas
Extulit; haec Decios, Marios, magnosque Camillos,
Scipiadus duras bello, et tu, maxime Caesar,
Qui nunc extremis Asia iam victor in oris
Imbellem avertis Romanis arcibus Indum.

Ibid., ii., 160-172.

2. Translate, with explanations when necessary:

Ante locum similem expiunt, ubi prius paretur
Arboribus seges et quo mox digesta feratur.

Steriles platani malos gessere valentis;
Castaneae fagus, ornusque incunat albo
Flore piri.

Si pinguis agros metabero campi,
Densi sere; in denso non sequior ubera laecharum;
Sin trunculis aedivo solum collisquis equineas,
Indulge ordinibus, nec solius omnis in ungues
Arboribus positis secto via limbo quodvis.

B. 1. Translate, with comments:

Redeunt interea ex ipsa re mi incidit suspitio: "hunc
Paululum obveni: ipse tristis: de imprevise nuptiae,
Non cohaerent." *Pa.* Quorsum nam istae? *Da.* Ego me continuo ad
Cirenacm.

Quom illo advenio, solitudo ante castrum: iam id gaudes.
Ca. Recte dicis. *Pa.* Pergo. *Da.* Mance: interea intro ire nomen
Video, exire nomen: matronam nullam in aedibus,
Nil ornati, nil tumultu: accessi: intro assepi. *Pa.* Scio:
Magnum signum. *Da.* Num videntur convenire haec nuptiis?
Pa. Non opinor, *Danc.* *Da.* "Ophioe" natus? non recte accipis.
Certa res est, citata puerum inde abiens conveni Cirenai:
Holera et pisciculos minutas ferro obolo in cenam veni.
Ca. Liberatus sum hodie, *Danc.* tam opem. *Da.* Ac nullus quidem.
Ca. Quid ita? namque huic puerus illum non dat. *Da.* Ridiculum
caput,

Quasi necesse sit, si huic non dat, te illam uxorem ducere:

TERENCE—*And.*, ii., 2, 22-35.

2. Hocine credibile aut memorabile,

Tanta uocordia innata quocumque ut nescit,
Vt malis gaudeant atque ex incommodis
Alterius sua ut componant commoda? ah
Idneſt uerum? immo id hominumſt genus peſsumum,
Denegandi modo quis pudet paulum aſent:
Poſt ubi tempuſt promiſſa iam perfici,
Tum coacti neceſſario ſe aperiant:
Et timent, et tamen reſ cogit donegare:
Ibi tum eorum impudentiſſima oratioſt:

"Quis tu es? quis mihi es? quor meam tibi?
Heus, proxumus sum egomet mihi."
At tamen "ubi fides?" si roges, nil pudet hic,
Vbi opust: illic ubi nil opust, ibi uerentur.
Sed quid agam? adeamne ad eam et cum eo iniuriam hanc expos-
tulem?

Ingeram mala multa? atqui aliquis dicat "nil promoueris!"
Multum: molestus certe ei fuero atque animo morem gessero.

3. Scan the first five lines of the first extract.
4. Give a sketch of the history of Roman Comedy.

C. Translate into Latin Elegiac verse:

She was not fair to outward view
As many maidens be,
Her loveliness I never knew
Until she smiled on me:
Oh then I saw her eye was bright,
A well of love, a spring of light.

But now her looks are coy and cold;
To mine they ne'er reply,
And yet I cease not to behold
The lovelight in her eye,
Her very frowns are better far
Than smiles of other maidens are.

SECOND YEAR STUDENTS.

A. 1. Translate:

"Nonne vides" aliquis cubito stantem prope tangens
Inquiet "ut patiens! ut amicis aptus! ut acer!"
Plures adnabunt thummi et oestaria crescent.
Si cui praeterea validus male filius in re
Praedara sublatu aletur; ne manifestum
Coelibis obsequium nudet te, leniter in spem
Arrepe officiosus, ut et scribere secundus
Heres et, si quis casus puerum egerit Orco,
In vacuum venias: perituro haec alia fallit.
Qui testamentum tradet tibi cunqne legendum,
Abnuero et tabulas a te remove memento,
Sic tamen, ut limis rapias, quid prima secundo
Cera velit versu; solus multas coheres,
Veloci percurre oculo. Plerumqne recoctus
Scriba ex quinqueviro corvum deludet hiantem,
Captatorque dabit risu Nasica Corano.

HOR.—Sat. ii, 5, 42–57.

2. Tune mihi dominus, rerum imperiis hominumque
Tot tantisque minor, quem ter vindicta quaterque
Imposita haud unquam misera formidine privet?
Adde super, dictis quod non levius valeat: nam,
Sive vicarius est, qui servo paret-uti mos
Vester sit-seu servus; tibi, quid sum ego? Nempe
Tu, mihi qui imperitas, alii servis miser atque
Ducis, ut nervis alienis mobile ligum.

Appendix,
No. 4.
General
Class Ex-
amination.

Quisnam igitur liber? Sapiens, nili qui imperiosus,
Quam neque pauperies neque mors neque vincula terreat,
Responsare cupidinibus, contemnere honores
Fortis, et in se ipso totas teres atque rotundas,
Externi ne quid valeat per leve morari,
In quem ianua ruit semper fortuna. Potesne
Ex his ut proprium quid nescere?

Ibid., 7, 75-80.

3. Write short notes on the following :—

Secundus haeres—Egerit Orco—ut lunis rapias—reocclus ex quinque-
viro—ter vindicta reposita—totus toros atque rotundas.

B. I. Translate, with short explanatory notes :

Quod scribis te velle scire qui sit rei publicae status, summa dissensio est, sed contentio dispar. Nam qui plus opibus, armis, potentia valent, profecisse tantum mihi videntur stultitia et inconstantia adversariorum, ut etiam auctoritate iam plus valerent. Itaque perperam adversantibus omnia, quae ne per populum quidem sine solitione se adsequi arbitrabantur, per senatum consecuti sunt : nam et stipendium Caesari decretum est et decem legati et ne lege Scamponia succederetur facile profectum est. Quod eo ad te brevius scribo, quia me status hic rei publicae non delectat : scribe tamen, ut te adnuentem, quod ipso litteris omnibus a pueritia deditus experiendo tamen magis quam discendo cognovi, tu tuis rebus integris discas, neque salutis nostrae rationem habendum nobis esse sine dignitate neque dignitatis sine salute.—*Cicero*.—*Ad Fam.*, i. 7.

2. Sollicitus quidem eram de rebus urbanis : ita tumultuosae cationes, ita molestae quinquaginta adforebantur ; nam ceteriora nondum audiebamus. Sed tamen nihil me magis sollicitabat quam in his molestiis non me, si quae rideunda essent, ridere tecum : sunt enim multa, sed ea non audeo scribere. Illud molesto fero, nihil me adhuc his de rebus habere tuarum litterarum. Quia re etsi, quoniam tu haec leges, ego iam annum manus confecero, tamen obvio mihi volum sint tuae litterae, quae me erudiant de omni re publica, ne hospes phare versum. Hoc melius quam tu facere nemo potest.—*Ibid.*, ii. 12.

3. Parse :

Profecisse—adversantibus—succederetur—experiendo—ceteriora—confecero—volum sint.

4. What deficiencies exist in the latin tense system, and how are they partially supplied ?

C. Translate into Latin prose :—

Pars.

While Caesar was remaining in these parts for the sake of getting together ships, there came to him ambassadors from the Morini to excuse themselves for their policy on the former occasion, on the ground that as barbarians and men unacquainted with our usage, they had made war on the Roman people, and to promise that they would do what he should impose. Caesar imposes upon them a large number of hostages, because he did not wish to leave a foe in his rear, and because he did not think that the attention due to such trifling matters should take precedence of Britain. When the hostages had been brought, he received the tribe into his protection.

Honor.

Cæsar had indeed too many objects of interest around him to become absorbed in any one. The sphere even of his literary engagements embraced almost every known subject of intellectual occupation. His skill and spirit in historical narration are sufficiently attested by the works which have descended to us under his name; and it must be remembered that at a time when even mere dexterity in composition was a rare and difficult accomplishment, the publication of only a few books in terse and vigorous language implied of necessity an extensive acquaintance with the masters of literature. Cæsar's historical style claims to be favourably contrasted with the roughness of Cato and Varro, and even with the artificial rhetoric of Cicero and Sallust, if it may not be compared with the chastened eloquence of Livy or the sententious gravity of Tacitus. But in its freedom, ease, and openness, it presents an unbroken reflection of the mind from which it emanated, confident in its simplicity, and superior to artifice. In the wordy contests of the bar and the forum, it was declared by his countrymen that Cæsar might have rivalled the great orator himself, if he had not preferred to throw himself into action.

Appendix,
No. 2.
Geomet.,
Class Ex-
amination.

A. 1. Translate, with short explanatory notes :

Iisdem ferme diebus, iisdem causis Germanicæ legiones turbatae, quanto plures, tanto violentius, et magna spe fore ut Germanicus Cæsar imperium alterius pati nequiret; daretque se legionibus vi sua cuncta tractaria. Duo apud ripam Rheni exercitus erant: cui nomen superiori, sub C. Silio legato: inferiorem A. Cæcina curabat. regimen summæ rei penes Germanicum, agendo Galliarum consui tam intentum. Sed quibus Silius moderabatur, mente ambigua fortunam seditionis alienas speculabantur: inferioris exercitus miles in rabiem prolapsus est, orto ab unaetvicesimæ quintanisque initio et tractis prima quoque ac vicesima legionibus. Nam iisdem æstivis in finibus Ubiorum babebantur per otium aut levia munia. Igitur audito fine Augusti, vernacula multitudo, nuper acto in urbe delecta, lasciviae sueta, laborum intolerans, implere ceterorum rudes animos: venisse tempus, quo veterani maturam missionem, invenes largiorum stipenda, cuncti modum miseriarum exposcerent sævitiarumque centurionum ulciscerentur. Non unus hæc, ut Paunicas inter legiones Perennius, nec apud trepidas militum aures alios validiores exercitus respicientium, sed multa seditionis ora vocesque: sua in manu sitam rem Romanam, suis victoriis augeri rem publicam, in suum cognomentum adscisci imperatores.—TACITUS—*Ann.* i., 31.

2. Translate and explain :

Verba edicti fuere paucæ et sensu permodesto: de honoribus parentis consulturum, neque abscedere a corpore idque unum ex publicis muneribus usurpare. Sed defuncto Augusto signum prætoris cohortibus ut imperator dederat; exubiae, arma, cetera aulae; miles in forum, miles in curiam comitabatur.

At patres, quibus unus metus, si intelligere viderentur, in questus, lacrimas, vota effundi; ad deos, ad effigiem Augusti, ad genus ipsius manus tendere, cum proferri libellum recitarique inesset. opes publicæ continebantur: quantum civium sociorumque in armis, quot classes, regna, provinciae, tributa aut vectigalia, et necessitates ac largitiones.

Rector juveni, et caeteris periculorum præmiorumque ostentator.

Prima Vari castra lato ambitu et dimensis principiis trium legionum manus ostentabant: dein semirato vallo, humili fossa accisæ iam reliquias consediisse intelligebantur.

Appendix,
No. 6.
General
Class Ex-
amination.

Nihil relicta impatoribus, ubi fecimus manipulos intervias, signa
adent, largitionem tentet, tamquam perna ambitiose filium ducis gregalia
habitu circumferat. Casarensque Caligulam appellari velit.

B. 1. Translate, with short explanatory notes:

Quid tibi pastores Libyae, quid pecora vesan
Prosequar, et raris habitata mapalia fecti. *l*
Saepe diem noctemque et lotum ex ordine memem
Pascitur itque pecus longa in desertis sine ullo
Hosquitis: tandem campū inest. Omnia rerum
Argentarius Aler agit, testumque laetumque
Aratque Anycheumque eunem Cressumque phaeonem.
Non secus ac patris nec Romanus in arvis
Iuncto sub fasce vium quum carpit et hosti
Auto exspectatum positus stet in agmine curvis.

VIRG. *Geor.* iii., 339-348.

2. Quin ipse stupore domus atque intima Leti
Tartari, caeruleasque implexas erinibus angues
Eumenides, tenuitque ihiatus tria Chelone ora,
Atque Ixionū vento rota constitit orbi.
Iamque pedem referens casus evaserat omnes,
Reditaque Rarydice saepe veniet ad auras,
Pone sequens—namque hanc debet Proserpina legem—
Quam soluta incautum demencia cepit amantem,
Ignotum quidem, scirent si ignorere Maenae;
Restitit, Rarydicaque manu, iam haec sub ipso,
Immonet, heu, victasque animi respexit. Ibi omnia
Effusus labor atque inuitis rupta tyranni
Fodora, terque frigus stagnis auditus Averna.

Ibid., 481-493.

3. Aut famam suspicere, aut sibi convenientia fingi.
Scriptor hominem si forte reponis Achillem,
Impiger, iracundus, inexorabilis, acer
Iura negot sibi nota, nihil non arroget armis.
Sit Modos forex inuictaque, fletibus Iux,
Perfidus Ixion, Io vago, trinitis Orestes,
Si quid inopertum scenae committis, et aule
Personam formare novam: nervetur ad imum,
Qualis ab incepto processerit, et sibi constet.
Difficile est proprie communia dicere; tuque
Rectius Iliacum carmen deducis in actus,
Quam si proferres ignota indutaque primus.
Publica iustitiae privati iuris erit, si
Non circa vilem patulumque moraberis orbem,
Nec Verbum verbo curabis reddere fidus
Interpres, nec desilies imitator in artem,
Unde pedem proferre pudor vetet aut operis lex.

HORACE—*A. P.*, 119-135.

4. Scribendi recte sapere est et principium et fons:
Rem tibi Socratico poterant ostendere chartae,
Verbaque provisam rem non invita sequentur,
Qui didicit, patriae quid dobeat et quid amicis,
Quo sit amore parens, quo frater amandus et hospes,
Quod sit conscripti, quod iudicis officium, quae

Partes in bellum missi ducis : ille profecto
Reddere personae scit convenientia cuique.
Respicere exemplar vitae morumque iubebo
Doctum imitatore, et vivas hinc ducere voces.
Interdum speciosa levis morantur recte
Fabula, nullius veneris, sine pondere et arte,
Valdus oblectat populum meliusque moratur,
Quam versus inopes rerum nugaequo canoras.

Ibid., 309-322.

5. (a.) The date of the Georgics may be determined approximately from internal evidence.

(b.) Give a brief sketch of the History of Roman Satire.

(c.) Analyze the Epistle to the Pisos, and examine its scope.

THIRD YEAR STUDENTS.

Honor Class.

1. Translate, with short notes :—

Contra M' Lepidus in hunc modum exorsus est. " Si P.C. unum id spectamus, quam nefaria voce C. Lutorius Priscus mentem suam et aures hominum polluit, neque laqueus, ne serviles quidem cruciatus in eum suffecerint. sin flagitia et facinora sine modo sunt, supplicis ac remediis principis moderatio maiorumque et vestra exempla temperant, et vana a sceleris, dicta a maleficio differunt : est locus sententiae, per quam neque huic delictum inapane sit et nos clementiae simul ac severitatis non poenitent. Saepe audiivi principem nostrum conquerentem, si quis summa morte misericordiam eius praevenisset. vita Lutorii in integro est, qui neque servatus in periculum rei publicae neque interfectus in exemplum ibit. Studia illi ut plena vecordiae ita inania et fluxa sunt : nec quidquam grave ac serium ex eo metuas, qui suorum ipse flagitiorum proditor non virorum animis, sed muliercularum adrepat. Cedat tamen urbe et bonis amissis aqua et igni areatur. Quod parinde censeo ac si lege maiestatis teneretur."

2. Translate and explain :

(a.) Caecinae dubitanti . . . castra nectari in loco placuit, ut opus et alii proelium inciperent.

(b.) De modo lucris et adversus lasciviam fautorum multa decernuntur.

(c.) Firmus Catus senator, ex intima Libonis amicitia; juvenem impudicum et inanibus facilem, ad Chaldaeorum promissa . . . impulit, dum proavum Pompeium, amicum Scriboniam, consobrinos Caesares, plenum imaginibus domum ostendit.

(d.) Ei, ut memoravi, avunculus Augustus, avus Antonius erant, magnaeque illic imago tristium lactorumque.

(e.) Commagenis Q. Servius praepositus, tum primum ad ius praetoris translatus.

(f.) Atque alibi angustiae et profunda altitudo, nullis inquirentium spatii penetrabilis.

(g.) Ille eludens respondit adfutarum, ubi praetor, qui de beneficiis quaereret, reo atque accusatoribus diem prodixisset.

3. What constitutional changes does Tacitus mention in the earlier books of the Annals?

4. Cite, as nearly as you can in his own language, any allusions you may remember to the earlier Roman history.

Appendix
No. 8.General
Class Ex-
amination.

5. Describe the status and the public duties of the *Equites* under the Imperial régime.

6. "Breves et infandas populi Romani amores." Illustrate this remark by reference to Roman history.

7. "Ca. Pompeius . . . suum legum auctor idem ac salvator." Justify this statement.

8. Trace the history of the *Lex Majestatis*, pointing out specially the development it received under Tiberius.

9. The date of the composition of Tacitus' *Annals* may be fixed within narrow limits by internal evidence.

Translate into Latin prose :—

Such was the end and such the funeral of Pompey the Great ; a man who had many opportunities of enslaving his country but rejected them all. He was kinder of glory than of power, of praise than command, and was more vain than ambitious. His talents in war were every way superior to those of his contemporaries except Caesar ; it was, therefore, his peculiar misfortune to contend with a man in whose presence all other military talent lost its lustre. Whether his aims during the last war were more just than Caesar's need for ever remain doubtful ; certain it is, that he frequently rejected all offers of accommodation, and began to talk of punishment before he had any pretensions to power. But whatever might have been his intentions in case of victory, they could not have been executed with more moderation than those of Caesar. The corruptions of the state were too great to admit of any other remedy but that of an absolute government, and it was hardly possible that power could have been fallen into better hands than those of the Conqueror. From Pompey's death, therefore, we may date the total extinction of the republic. From this period the senate was dispossessed of all its power ; and Rome, from henceforward, was never without a master.

L. 1. Translate, with short explanatory notes :

Simo. Quia iusto : otiose perspecta aetia, ut lubet.

Theopropides. Bene longinquae abire in aeternum.

Simo. Fictum edepol nolo.

Tranio. Viden hoc ante aetis vestibulum et ambulatorium quousmodi ?

Theopropides. Laculentum edepol profecto.

Tranio. Ago quæstio, postea quousmodi

Quanta firmitate facti et quanta cressitudine.

Theopropides. Non videtur vidisse postis pulchriora.

Simo. Pol mihi

Eo pretio empti fuerunt olim.

Tranio.

Andin " fuerunt " dicere ?

Vix videtur continere lacrimas.

Theopropides.

Quanti hosce onerosi ?

Simo. Tris minas pro istis duobus præter necessarium dedi.

Theopropides. Hercle qui multo improbiiores sunt, quam a primo credidi.

Tranio. Quapropter ?

Theopropides.

Quia edepol ambo ab infimo terminos accit.

Tranio. Intemptestinas excisos credo : id ois vitium nocet.

Atque etiam nunc satis boni sunt, si sunt inducti pice.

Non enim hæc palfifagus opufex opera fecit barbarus.

Viden coagmenta in foribus ?

Theopropides.

Video.

Tranio.

Specula quam arto dominiunt,

Theopropides. Dormiunt ?

Tranio. Illud, quidem, ut conuenient, nolui dicere.
Satin habes?

Theopropides. Ut quicquid magis contempler, tanto magis placeat.

Tranio. Vide, ubi ludificatur una cornix uolturios duca.

Theopropides. Non edepol uideo.

Tranio. Atego uideo eam inter uolturios duos :

Cornix astat : ea uolturios duos uicissim uellicat.

Quæso hoc ad me specta, cornicem ut conspicio possies.

Iam uides?

Theopropides. Perfecto nullam equidem illie cornicem intaeor.

Tranio. At tu istoc ad nos optuere, quoniam cornicem nequis

Conspicari, si uolturios forte possis contui.

Theopropides. Omnino, ut te apsoluam, nullam pictam conspicio hic auem.

Tranio. Age, iam mitto : ignosco : ætate non quis optauerit.

Theopropides. Haec, quæ possum, ea mihi perfecto cuncta uehementer placeant.

PLAUTUS—*Mos.* iii., 2, 130–155.

2. Translate and explain :—abi, dierecete—opsonate pollucibiliter—Quid tibi, malum, me, aut quid ego agam, curatist?—Sine me aliatum fungi fortunas meas—Soli gerundum censeo morem et capiundas crines—Mirum quin vigilantia diceret qui abhinc sexaginta annis occisus foret—Continuo adueniens palum iuecisti mihi—Venisti huc te extentatum—Latius demum pretium operæ est iuissu.

3. What rules are we to observe in writing Latin words (1) borrowed from the Greek, (2) common to Greek and Latin. Give examples from Plautus of the spelling of Greek words current in his time.

4. What do philologists understand by phonetic, and what by dynamic, change? Mention and illustrate the chief methods employed by the latter.

5. Different accounts have been given of the forms *fazim*, *ausim*, *fazo*, *occepso* : which do you accept, and why? Explain the forms *seruasse*, *prohibessis*.

6. Classify, and give examples of, the various forms of assimilation in Latin.

II. 1. Translate :

Ins postulas : sed quid ad rem? Plus ille poterat. Itaque excussis tuis uocibus et ad te et ad praedes tuos milites misit, quum repente [est] a te praecleara illa tabula prolata. Qui risus hominum! tantam easo tabulam, tam varias, tam multas possessiones, ex quibus praeter partem Miseni nihil erat quod is, qui auctionaretur, posset suum dicere. Auctionis uero miserabilis aspectus : ueris Pompeii non multa esque maculosa : eiusdem quaedam argentea uasa colla : sordida mancipia, ut doleremus quidquam esse ex illis reliquiis quod uidere possemus. Hanc tamen auctionem heredes L. Rubrii decreto Caesaris prohibuerunt. Haerebat uebulo : quo se uerteret non habebat. Quin his ipsis temporibus domi Caesaris percussor ab isto missus deprehensus dicebatur esse cum sica. De quo Caesar in senatu aperte in te inuehens questus est. Proficiscitur in Hispaniam Caesar paucis tibi ad solvendum propter inopiam tuam prorogatis diebus. Ne tum quidem sequeris. Tum bonus gladiator rudem tam cito? Hunc igitur quisquam, qui in suis partibus, id est in suis fortunis, tam timidus fuerit, pertimescat?—CICERO—*Phil.* ii., 29.

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Appendix,
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amination.

A plausible reading has been proposed for the strange *circumstæ-
uocibus*.

2. Ubi est septiens milliens, quod est in tabulis, quæ sunt ad Opis?
finestæ illius quidam pecunio, sed tamen quæ nos, si eis quorundam erant
non redderetur, a tributis posset vindicare.

Reduce this sum to English money. Write a note on *a tributis*.

MODERN LANGUAGES.—*Examiner, Professor Meissner.*

FIRST YEAR STUDENTS.

FRENCH.

Translate into French :

I. Do you know this young man? No, I do not know him. Who will answer for them? I. Who is there? Ho. Have you invited her? Yes, but she has not been able to come. Has the shoemaker brought neither shoes nor boots? Yes, but he has forgotten the slippers. In what season are the mountains covered with snow? In winter. Do you see anything? I see nothing. Where shall I put this pocket handkerchief? Put it on the chair. Which of these houses do you prefer? I like neither the one nor the other. Are there as many roses in your garden as in mine? No, but the few I have are more beautiful than yours. What have you seen along the road? We have seen little white houses and pretty orchards.

II. The French fleet, attacked by the English, was almost annihilated. They have written several letters to each other. Whatever he may do, you blame him; whatever he may say, you contradict him. I will do my best. He does all in his power. You are pleased to say so. Every one of us has his duty to fulfil; do yours, I shall do mine. He is not only not learned, but he is ignorant. Stop here as long as you like. Old people are suspicious. A man whom nobody pleases is much more unhappy than a man who pleases nobody. The town was taken without striking a blow. Let us drink to the health of his Royal Highness. Keep these boys quiet. Whatever he does, he does well. Does it suit you to come at six o'clock? Tell me what you are going to do. He went away without saying anything. Never speak ill of your neighbour. You are wrong to read these novels, they are good for nothing. It is better to be silent than to talk nonsense. You ought to have done that yesterday. It is going to strike eleven o'clock. He will leave this day fortnight. Sit down by my side, and do not place yourself in front of me. He has been playing his pranks.

Translate into English :

Des coupôles dorées annoncent de loin Moscou; cependant, comme le pays environnant n'est qu'une plaine, ainsi que toute la Russie, on peut arriver dans la grande ville sans être frappé de son étendue. Quelqu'un disait avec raison que Moscou était plutôt une province qu'une ville. En effet, l'on y voit des cabanes, des maisons, des palais, un hâzar comme en Orient, des églises, des établissemens publics, du piéces d'eau, des bois, des parcs. La diversité des mœurs et des nations qui composent la Russie, se montrait dans ce vaste séjour. Voulez-vous, me disait-on, acheter des schalls de Cachemire dans le quartier des Tartares? Avez-vous vu la ville chinoise? L'Asie et l'Europe se trouvaient réunies dans cette immense cité. On y jouissait de plus de liberté qu'à Pétersbourg, où

la cour doit nécessairement exercer beaucoup d'influence. Les grands seigneurs établis à Moscou ne recherchaient point les places ; mais ils prouvaient leur patriotisme par des dons immenses faits à l'état, soit pour des établissemens publics pendant la paix, soit comme secours pendant la guerre. Les fortunes colossales des grands seigneurs russes sont employées à former des collections de tous genres, à des fêtes dont les Mille-et-Une Nuits ont donné les modèles, et ces fortunes se perdent aussi très-souvent par les passions effrénées de ceux qui les possèdent. Quand j'arrivai à Moscou il n'était question que des sacrifices que l'on faisait pour la guerre. Un comte de Momenoff levait un régiment pour l'état, et n'y voulait servir que comme sous-lieutenant ; une comtesse Orloff, aimable et riche à l'asiatique, donnait le quart de son revenu. — MADAME DE STAEL, *Holstein*.

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amination.*

GERMAN.

Translate into German :—

I. My sisters would have been at school, if they had not been ill. I have been waiting for you. They have killed a wolf. What would he say, if he knew it. The enemy has been put to flight. We have translated a page. The gardens are planted with trees and flowers. The situation of Coblenz is charming. Many merchants buy their goods at the Leipzig fair. I have done my duty. Have you spent your money ? By which train will you go ? What sort of wine is this ? He has lived so extravagantly, that he has left nothing to his family. It is a quarter to eleven. You must write more distinctly. He swims against the stream. He is gone into the garden. On account of the important services which he has rendered to the State, a considerable pension has been granted to him.

Translate into English :—

Dem spanischen Volk, welches in Bezug auf fürstliche Persönlichkeit durch seinen Kaiser nicht eben verwöhnt war, galt es ziemlich gleich, wer sie künftig beherrschen wolle ; nur ihr König in Madrid residiere und das ganze Reich ungehindert beisammen halte ; ihre vorwiegende Meinung ging auf einen jüngeren französischen Prinzen, der sich des Schutzes des mächtigen Ludwig zur Vertheidigung des Erbes erheben werde. Umgesetzt hatte König Wilhelm von England, damals der achte Schiedsrichter Europa's und der Hort des politischen Gleichgewichts, der Allen die Sorge, daß durch das spanische Erb nicht die Macht eines bereits starken Geschlechts, heiße es nun Bourbon oder Habsburg, zu erdrückendem Uebermaß gesteigert werde : sein Wunsch ging also auf eine Theilung der Monarchie, etwa in der Weise, daß der bayerische Prinz den Hauptstamm, Spanien, Belgien und die Colonien, Oesterreich das alte Reichsteilung Mailand, Frankreich, Neapel und Sicilien erhalte. — SENAR.

SECOND YEAR STUDENTS.

FRENCH.

Translate into French :—

A great writer is the friend and benefactor of his readers ; and they cannot but judge him under the deluding influence of friendship and gratitude. We all know how unwilling we are to admit the truth of any disgraceful story about a person whose society we like and from whom we have received favours. Just such is the feeling which a man

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of liberal education entertains towards the great minds of former ages. They have guided him to truth. They have filled his mind with noble and graceful images. They have stood by him in all vicissitudes, comforters in sorrow, nurses in sickness, companions in solitude. These friendships are exposed to no danger from the occurrences by which other attachments are weakened or dissolved. Time glides on; fortune is inconstant; tempers are soured; bonds which seemed indissoluble are daily sundered by interest, by emulation, or by caprice. But no such cause can affect the silent converse which we held with the highest of human intellects.—MACAULAY.

II.—Retranslate :—

The interior of the empire being now threatened, it was for Moscow to give the example. This capital, justly called by the poets "Moscow with the gilt cupolas," was a vast and odd assemblage of two hundred and ninety five churches and fifteen hundred castles, with their gardens and out-houses. These brick-palaces and their parks, intermingled with pretty wooden houses and even thatched cottages, were scattered over several square leagues of uneven ground. These buildings, palaces and even shops, were covered with polished iron. A single ray of sunshine caused this splendid town to glitter in a thousand various colours. At its aspect the enchanted traveller stopped dazzled. It recalled to him these marvels with which the oriental poets had charmed his childhood. On entering the city-walls his astonishment even increased.—SEGUR.

III.—Philological Questions.

- (a.) Explain the meaning of the terms : *langue d'oïl* and *langue d'oil*.
- (b.) Explain the origin of the difference in the vowel of the terms : *roi*, *reine*.
- (c.) Give some stereotyped forms of expression in which the French article has retained the force of a demonstrative pronoun.
- (d.) Explain the nominative forms : *seigneur*, *baron*, *garçon*.
- (e.) What is the gender of substantives derived from adjectives? Are there any exceptions?
- (f.) What is the probable cause of the change of gender of Latin abstracts in *or*.

GERMAN.

Translate into German :—

I. These are the happiest days of my life. The papers contain nothing of importance. I shall do all in my power. A golden key opens all locks. The revenue is not sufficient to cover the expenditure. Will he accomplish the work? Have you breakfasted? He works in the morning and sleeps in the afternoon. We shall ascend the mountain before the sun rises. The manner in which I was received surprised me. I have succeeded. Music was heard in the distance. The matter has at last been decided.

II. The preparations of all the powers united against Prussia were extraordinary. King Frederic had, however, one great advantage over his opponents. His well-filled treasury enabled him to provide all his troops abundantly with everything necessary for the impending campaign; whilst his enemies had to exert themselves to the utmost in order to obtain ready money by loans, or to prevail upon contractors to furnish army-supplies on credit.

Translate into English :—

Indessen geschah der Angriff der Preußen mit solchem Ungestüm, daß Alles auf dem linken Flügel über den Haufen geworfen wurde. Preussische Regimenter kamen den gemachten Feinden zu Hülfe, allein man ließ sie nicht einmal sich aufstellen; kaum zeigten sie sich, so wurden sie auch zurückgeschlagen. Ein österreichisches Regiment fiel auf andre, die Schlachtreihe wurde auseinander gestürzt und die Unordnung war unaussprechlich. Die kaiserlichen Kürassiere stellten sich in Schlachtreihe, allein eine Geschützreihe des Feindes brachte sie bald auseinander, worauf die preussische Reiterei auf sie fiel und sie gänzlich aus dem Felde schlug. Viele tausend von den kaiserlichen Truppen konnten zu keinem Schuß kommen, sie mußten mit dem Strom fort. Der stärkste Widerstand geschah in dem Dorf Leuthen, das mit vielen kaiserlichen Truppen und Geschütz besetzt war.—ARCHENHOLZ.

THIRD YEAR STUDENTS.

FRENCH.

Translate into French :—

Johnson was now in his seventy-second year. The infirmities of age were coming fast upon him. That inevitable event, of which he never thought without horror, was brought near to him; and his whole life was darkened by the shadow of death. He had often to pay the cruel price of longevity. Every year he lost what could never be replaced. The strange dependents to whom he had given shelter, and to whom, in spite of their faults, he was strongly attached by habit, dropped off one by one; and, in the silence of his home, he regretted even the noise of their scolding matches. The kind and generous Thrale was no more; and it would have been well if his wife had been laid beside him. But she survived to be the laughing-stock of those who had envied her, and to draw from the eyes of the old man, who had loved her beyond anything in the world, tears far more bitter than he would have shed over her grave.—MACAULAY.

Literary Questions :—

- (a.) Point out the contrast in the opinions of Bossuet and Massillon with respect to the absolute power of kings.
- (b.) Give a sketch of the Baron de Grimm.
- (c.) What was the origin of the *Encyclopédie*? Mention the principal contributors and their respective departments.
- (d.) Give a summary in French of any one of the following works :—*Corneille's Cid*, *Racine's Athalie*, *Lesage's Gil Blas*, *Gresset's Ver-Vert*.

MATHEMATICS.—*Examiner, Professor Purser.*

FIRST YEAR STUDENTS.

ALGEBRA.

1. Solve the equations

$$(a) 10x + \frac{3}{x} = 11.$$

$$(b) \sqrt{x+1} + \sqrt{x-1} = 4\sqrt{\frac{x}{5}}.$$

2. Given $\frac{x}{2} - \frac{y}{3} = 1$ $\frac{x}{3} - \frac{y}{5} = 1$, find x and y .

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3. Define an arithmetic series and a geometric series. Place three arithmetic means between 4 and 7 and three geometric means between 16 and 81.

4. Define the logarithm of a number to the base 10. Given $\log 2 = .30103$ and $\log 3 = .47712$. Find the logarithms of 50 7.5 and 0.6. How could you tell beforehand the log 2 would be very nearly .3?

5. A working 7 hours and B 9 hours a day can do a piece of work in 11 days. Had A worked 9 hours and B 7 hours a day they would have taken one day less. How much more does A do in an hour than B?

6. Given $\cos 2\theta = \frac{3}{5}$, find to two decimal places $\cos \theta$ and $\tan \theta$.

If $\cos 2x + \cos 8x = \cos 4x + \cos 6x$, find $\cos x$.

7. Calculate to two places of decimals the logarithms of the numbers from 1 to 9 to base e .

8. Eliminate x, y, z, w from the equations—

$$a_1x + b_1y + c_1z + d_1w = 0$$

$$a_2x + b_2y + c_2z + d_2w = 0$$

$$a_3x + b_3y + c_3z + d_3w = 0$$

$$a_4x + b_4y + c_4z + d_4w = 0$$

Prove that a determinant is unaltered if the columns are changed into rows, and vice versa.

9. Prove

(1) that the series $1 + x + \frac{x^2}{1.2} + \frac{x^3}{1.2.3} + \dots$ is convergent;

(2) that if we call the result $\phi(x)$, then $\phi(x)\phi(y) = \phi(x+y)$;

(3) that $\phi(x) = e^x$ where $e = 1 + 1 + \frac{1}{1.2} + \frac{1}{1.2.3} + \dots$

10. Give Euler's method of establishing the binomial theorem for negative and fractional exponents. There is a theorem assumed without proof in this investigation. Point out the theorem and supply the proof.

11. Sum the series

$$\frac{1}{1.2} + \frac{1}{2.3} + \frac{1}{3.4} + \dots$$

$$1:2.3 + 2:3.4 + 3:4.5 + \dots$$

each to n terms.

12. Find when

$$\sin^m\left(\frac{x}{m}\right) \sin^n\left(\frac{\alpha - x}{n}\right) \text{ is greatest,}$$

α and x being angles in the first quadrant.

13. Supposing that owing to the fall in the value of money or any other cause land rises in marketable value p per cent. from year to year, what rent ought a landlord to receive who lets an estate on lease for n years, the interest of money being taken at r per cent.?

CONIC SECTIONS.

1. Tangents drawn to a parabola from any point subtend equal angles at the focus, and the triangles formed by the tangents with the focal radii are similar.

2. Prove the focus-and-directrix property of any section of a cone.

3. In an ellipse the rectangle under the central perpendicular on the tangent and the semi-diameter parallel to the tangent is constant.
4. The portion of the tangent to a hyperbola intercepted by the asymptotes is bisected at the point of contact.
5. Find the locus of the vertices of all right circular cones which pass through a given ellipse.
6. Two ellipses have a focus in common. The first is fixed while the second revolves round this focus; find the envelope of one of their common chords.

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GEOMETRY AND TRIGONOMETRY.

1. If a line be divided equally and unequally the rectangle under the unequal segments together with the square of the intermediate segment is equal to the square of half the line.
2. Angles in the same segment of a circle are equal.
3. Regarding a tangent to a curve as the limiting position of a chord joining two points on it as these points approach, show that the tangent to a circle is at right angles to the radius.
4. Explain what is meant by commensurable and by incommensurable quantities.

What is meant by the ratio of two commensurable quantities? How can this definition be extended to include incommensurable quantities?

5. If two triangles have an angle of the one equal to an angle of the other and the sides about these angles proportional they are similar.

6. Define $\sin A$, $\tan A$, $\sec A$.

Express $\sin A$ in terms of $\tan A$.

Find $\cos 30^\circ$, $\sec 45^\circ$, $\sin 15^\circ$.

7. Prove that $\sin \frac{1}{2}A = \sqrt{\frac{(s-b)(s-c)}{bc}}$.

Explain how you would calculate A from this formula with a table of logarithms.

8. Prove that $R = \frac{a b c}{4 N}$

where R is the radius of the circumscribing circle and N the area of the triangle.

Calculate R for the triangle whose sides are 5, 6, 7.

9. If a right line is perpendicular to two straight lines in a plane it is perpendicular to every line in the plane.

10. Find the volume of a cone and of a frustum of a prism.

11. AB is the base of a given semi-circle whose centre is C . P a fixed point on the radius at right angles to the base. EF a varying chord through P . Show that the area of the quadrilateral $AEPB$ is a maximum when the angle $ECF =$ the angle PAC .

12. Assuming the series $\sin \theta = \theta - \frac{\theta^3}{1.2.3} + \&c.$

Find to three decimal places $\sin 5^\circ$.

Find also to the nearest second $\sin^{-1}\left(\frac{1}{10}\right)$.

13. In a right-angled spherical triangle

$$\sin a = \sin A \sin c \quad \cos c = \cot A \cot B.$$

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amination.

14. Prove the formula

$$\sin \frac{1}{2}(A - B) = \frac{1}{2}C \cdot \frac{\sin \frac{1}{2}(a - b)}{\sin \frac{1}{2}c}.$$

15. Given the longitude and latitude of two points on the earth's surface find the distance between them.

16. Express the perimeter of a spherical triangle in terms of two angles and the side between them.

17. Given in position the vertical angle of a spherical triangle and a point through which the base passes. Find the relation between the sides.

18. Reciprocate the theorem that the three arcs of great circles drawn through the vertices to bisect the area of a triangle meet in a common point.

SECOND YEAR STUDENTS.

CO-ORDINATE GEOMETRY.

1. The equations of two lines are

$$3x + 5y = 7 \quad x - 2y = 3$$

find the angle between them and the equation of the line joining their point of intersection to the origin.

2. The equations of two circles are

$$x^2 + y^2 = 3x \quad x^2 + y^2 = 5y.$$

Give a diagram showing their position. Find the points where they intersect and the equation of their common chord.

3. Given base of a triangle and product or ratio of the tangents of the base angles; find the locus of the vertex.

4. A circle constantly passes through two fixed points, find the locus of the points of contact of tangents parallel to a given line.

5. Find the equation of the tangent to a parabola at any point. Deduce geometric properties from the equation.

6. Prove by the method of co-ordinates the following properties of a central conic.

- (1) The existence of diameters.

(2) That the rectangles under the segments of intersecting chords are to each other as the squares of parallel semi-diameters.

(3) That the locus of the points of harmonic section of chords through a fixed point is a right line.

7. A conic being given by the general equation, find

- (1) the co-ordinates of its centre;

- (2) the angle between its asymptotes.

8. Find the locus of the intersection of normals to an ellipse at the extremities of a focal chord.

9. Find (1) in x and y , (2) in r and p co-ordinates the equation of the envelope of a right line of constant length with its extremities moving on two fixed lines at right angles.

Find the radius of curvature at any point of this curve and the equation of its evolute.

10. A system of conics passes through the same four points, find the locus of the points of contact of tangents through a given point P . Show that when P is in directum with any two of the four given points, the locus breaks up into a right line and a conic.

DIFFERENTIAL AND INTEGRAL CALCULUS.

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1. Define a differential coefficient and in accordance with your definition find

$$\frac{d}{dx}(\cos x) \quad \frac{d}{dx}\left(\frac{1}{x^2}\right).$$

2. Find the equation of the tangent at any point of a curve.

Ex. $y^2 = \frac{x^3}{6}.$

3. Explain how to find when a given function of x is a maximum or minimum.

Ex. $u = \frac{x}{x^2 + 1}.$

Find a point in the line joining the centres of two spheres from which the greatest portion of spherical surface is visible.

4. Give any complete proof of the binomial theorem.

5. Discuss the form of the remainder in Taylor's series.

6. Investigate the expression for the radius of curvature in terms of x and y of r and p of s and w of p and w .

Find the locus of points on a system of parabolas having the same axis and vertical tangent at which the curvature is the same.

7. Trace the curve $x^2 + y^2 = 3axy.$

8. Define $\int_a^b f(x)dx$ as the limit of a sum.

Show that in general if $\frac{d}{dx}F(x) = f(x)$, this integral $= F(b) - F(a).$

Point out the exception to this.

9. Find by the integral calculus

- (1) the area of a portion of a parabola cut off by a right line ;
- (2) the volume of a cone ;
- (3) the surface of the sphere.

10. Required

$$\int \frac{x dx}{\sqrt{a^2 - x^2}} \quad \int x \cos ax dx \quad \int \frac{dx}{(1+x^2)\sqrt{x^2-1}}.$$

11. Find an expression for the cosine of the angle between the curve $f(x, y, a) = 0$ and the curve $\frac{d}{da}f(x, y, a) = 0$, where a is an arbitrary parameter.

Show that if $\left(\frac{df}{dx}\right)^2 + \left(\frac{df}{dy}\right)^2 = 1$ identically, the two curves intersect at right angles.

NATURAL PHILOSOPHY.—*Examiner, Professor Everett.*

SECOND YEAR STUDENTS.

EXPERIMENTAL PHYSICS.

[No credit will be given for numerical answers unaccompanied by work. The left hand pages are for rough work. The books are not, under any circumstances, to be mutilated.]

1. What is the height of the homogeneous atmosphere, at a place where the barometer, standing at 30 inches, falls .00114 of an inch per foot of ascent ?

2. If the velocity of sound in iron is 500,000 centimetres per second, and the specific gravity of iron is 7, find the modulus of elasticity for iron in absolute units based on the centimetre, gramme and second.

3. When a simple musical sound is reflected directly back from a plane obstacle, show that the joint action of the direct and reflected waves tends to produce nodes and antinodes at definite distances from the reflecting surface.

4. How must 20 precisely similar cells be set up to give the maximum current through a wire whose resistance is 5 times that of one of the cells?

5. A battery consists of 4 similar cells arranged in series, and its terminals are connected by a wire whose resistance is just equal to that of one cell. Compare the heat generated in this wire with the heat which would be generated in it if one more cell were added to the battery.

Describe briefly the moving parts and the electrical connexions in Thomson's Quadrant Electrometer.

7. What is the mode of operating to obtain the spectrum of the sun's edge; and what is the character of the spectrum thus observed?

8. Explain the effects obtained by mixing coloured powders or pigments; and state some of the principal laws of the mixture of coloured lights.

9. Draw a sketch of Foucault's apparatus for measuring the velocity of light; and give a very brief accompanying explanation.

10. On what principle has it been established, by spectroscopic observation, that certain stars are approaching the earth, and that certain others are receding?

11. Show that, in certain circumstances, small specific heat will produce the same appearances as great conductivity; and give the definition of conductivity.

12. Distinguish between conduction, convection, and radiation of heat; giving an example of each.

13. What weight of copper at $100^{\circ}\text{C}.$ will be just sufficient to melt 1 gramme of ice at $0^{\circ}\text{C}.$, the latent heat of water being 79, and the specific heat of copper being $\cdot 092$?

14. How would you proceed to draw a succession of sparks alternately positive and negative from a Leyden jar once charged? What is the explanation of the process?

15. If a screen receives the same illumination from two candles at the distance of 3 feet, as from a gas flame at the distance of 5 feet, how many candles is the gas flame equivalent to?

16. State the principle on which the possibility of achromatism depends; and the other principle which renders perfect achromatism impossible.

MATHEMATICAL PHYSICS.

[Honor Candidates will receive no credit for answers to questions 1—11. Questions 12—20 carry only half the marks of questions 21—30.]

1. Two strings stretched with weights of $2\frac{1}{2}$ and 6 lbs. respectively, are knotted together at a right angle, and a third weight is hung from the knot. Find the magnitude of this third weight if the system is in equilibrium.

2. Find to 1 place of decimals, the horizontal and vertical components of a force of 70 lbs. acting at an inclination of 30° to the horizon.

3. The greater of two non-concurrent parallel forces is 56; the result-

ant of the two is 35, and it acts at a distance 15 from the greater component. Find the distance between the components.

4. Find geometrically the centre of gravity of one of the halves into which a regular hexagon is divided by a diagonal.

5. Assuming the parallelogram of forces, prove that the moments of two forces (whose lines of action meet) about any point situated on the line of action of their resultant are equal and opposite.

6. A uniform beam 20 feet long, lies upon a platform and projects 6 feet beyond the edge. If the weight of the beam be 100 lbs., what weight hung from it at a point 1 foot from the end will be just sufficient to make it tip up?

7. A swing is formed by tying one end of a rope to a horizontal beam, while the other end is merely passed through a ring under the beam, and brought down so as to be held in the hand of the person swinging. Find the force with which he must pull the free end in order to sustain his weight while sitting on the swing, the ropes being parallel and friction being neglected.

8. Write down the formulae for v and s when there is an initial velocity V and a uniform acceleration f ; and prove that $v^2 = V^2 + 2fs$.

9. Investigate the mechanical advantage of the Bramah press.

10. What is the greatest admissible length of the shorter leg of a siphon intended for drawing off a liquid whose specific gravity is 1.6?

11. A concave mirror is a small portion of a sphere whose radius is 1 foot. Find the positions of the image of a small object held (1) at the distance of 1 inch, and (2) at the distance of 11 inches from the mirror, directly in front of it.

12. Assuming the principle of the parallelogram of forces to be true as regards the direction of the resultant, prove that it must also be true as regards its magnitude.

13. Three forces of 5, 7 and 10 lbs. acting at a point are in equilibrium. Find the cosine of the angle between the directions of the first two.

14. Prove that the moment of the resultant of any number of forces in one plane about a point in the plane is the algebraic sum of the moments of the forces.

15. State precisely what is meant by the assertion that g at a certain place is 32.2 .

16. Give a formula for the total pressure of a liquid on the surface of a body immersed in it, stating whether the transmitted atmospheric pressure is or is not included. Also give a construction for the centre of pressure of a plane area immersed in a liquid.

17. Find the total pressure on a circular area of 4 centimetres radius, when just immersed in water at an inclination of 30° to the horizontal.

18. Investigate a formula for the position of the optical centre of a lens; and define the line of collimation of a telescope.

19. If a prism of 90° will only transmit rays incident nearly tangentially, find its index of refraction.

20. Define right ascension, declination, a sidereal day, an apparent solar day, a mean solar day, and the equation of time. Also define latitude and longitude both terrestrial and celestial.

21. A uniform triangular prism, its ends being right sections, rests in barely stable equilibrium when laid with the smallest of its three faces on a horizontal table. Show that this face has less than half the area of the largest.

22. A cube is cut in two by a plane passing through three of its corners. Find the centres of gravity of the two pieces.

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23. If a certain acceleration has the numerical value 32.2 when the foot and second are the units, find its numerical value when the unit of length is 100 feet, and the unit of time 5 seconds.

24. A block of wood weighing 50 lbs., suspended by a string 30 feet long whose mass may be neglected, is struck in a line traversing its centre of gravity by a bullet weighing 1 oz. and moving horizontally with a velocity of 1,600 feet per second. The bullet remains buried in the block. Find the velocity thus communicated to the block, and the height to which its centre of gravity will ascend.

25. Prove that the time of a complete vibration of a single pendulum is approximately $2\pi\sqrt{\frac{l}{g}}$.

26. A body of unknown specific gravity is weighed against brass weights in two liquids of known specific gravities d_1, d_2 , both body and weights being immersed. The apparent weights thus obtained are w_1, w_2 grammes. Deduce the volume (in cubic centimetres) and specific gravity of the body, the sp. gr. of brass being 8.

27. Prove that the geometrical focus in the case of refraction from dense to rare at a single plane surface is $\frac{a}{\mu}$.

28. Investigate a formula for the positions of conjugate foci in refraction at a single spherical surface.

29. Find the joint focal length of two lenses placed in contact, with their axes coincident, their thicknesses being neglected.

30. A piston 1 metre in radius, works air-tight without friction in a completely closed horizontal cylinder, full of water, and is pulled outwards by an artificially applied force which is just sufficient to reduce the maximum pressure within the cylinder to atmospheric pressure (10.3 metres of water); find the magnitude of this artificially applied force.

THIRD YEAR STUDENTS.

MATHEMATICAL PHYSICS.

Honor.

1. Prove that $\int r^2 dm$ is the measure of the resistance which a rigid body free to turn about a fixed axis opposes to change of angular velocity.

2. Investigate the integral of normal attraction over a closed surface, the attracting matter being partly within and partly without the surface, and the law of force being that of the inverse square.

3. Prove that the intensity of force in different parts of the same tube of force (the law being that of the inverse square) varies inversely as the section of the tube, provided there is no attracting matter in the intervening portion of the tube.

4. Find the centre of gravity of a triangular lamina, when the density varies as the n^{th} power of the distance from the base.

5. Prove that in the common catenary the tension varies directly as the ordinate.

6. Define the central axis of a system of forces applied to a rigid body; and prove that every such system has a central axis.

7. Write down the analytical conditions of equilibrium for a particle on a smooth surface, and for a particle on a smooth curve.

8. Prove that the centres of gravity of all plane sections of a prism lie on one line parallel to the edges of the prism; and that the volume of

the portion contained between any two such sections is the product of the distance between their centres of gravity into the area of a right section.

9. Investigate the law of force for motion in a circular orbit, the centre of force being on the circumference.

10. Prove that $Xdx + Ydy + Zdz = vdv$, and point out the bearing of this equality upon the relations of potential and kinetic energy.

11. A particle moves in a straight line from a distance a towards a centre of force, the force varying inversely as the cube of the distance.

Show that the whole time of descent is $\frac{a^2}{\sqrt{\mu}}$.

12. When a flexible string is acted on by forces whose directions all pass through one centre, prove that the tension at any point of the string is inversely as the perpendicular from the centre on the tangent at this point.

13. Find the condition that a two-handled drawer may stick fast when pulled directly forwards by one of its handles.

THIRD YEAR ENGINEERING STUDENTS.

NATURAL PHILOSOPHY APPLIED.

1. Prove that any instantaneous motion of a rigid plane figure, in its own plane, is equivalent (so far as regards properties depending on two consecutive positions) to rotation about a point; and apply this principle to deduce the angular velocity-ratio of two rotating pieces connected by a link.

2. Prove that, when two sliding pieces work together in one plane, about fixed centres, the sliding is the product of the sum or difference of the angular velocities by the distance of the point of contact from the intersection of the line of centres with the common normal.

3. Draw a diagram whose sides shall represent the pulls or thrusts in a given triangular frame acted upon at its three corners by three given forces in equilibrium.

4. Prove that the work done in drawing a body up a rough inclined plane, when the force acts parallel to the plane, is equal to the work which would be done in drawing it along the base of the plane by a force parallel to the base (supposed equally rough), plus the work done against gravity in raising it through the height of the plane. Also investigate the most advantageous angle at which a force can act in drawing a body up a rough inclined plane.

5. An equilateral triangle, of side a , revolves about one side. Find the volume of the solid generated.

6. Prove that, when a prismatic beam is subjected to a bending couple, the quotient of this couple by the curvature which it produces, is equal to the product of Young's modulus of elasticity by the moment of inertia of the cross section.

7. What is meant by the neutral surface in a beam subjected to bending forces? What is its position in the preceding question; and how will its position be affected if a longitudinal extending force be superimposed on the couple?

8. Prove the principle of Amsler's planimeter, when the centre lies outside the area to be measured.

9. What is usually meant by the "total heat" of steam at a given temperature? Point out the false assumption which the name seems to imply.

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10. A wall of brickwork is to be built round a reservoir 20 feet deep; its slope is inward; it is one foot thick at the top; what must be its thickness at the bottom, that when the reservoir is full the line of resistance may cut the base 6 inches within the extrados?

11. State and prove the law connecting the moments of inertia of a rigid body about parallel axes; and prove the convertibility of the centres of suspension and oscillation.

CHEMISTRY.—*Examiner, Dr. Andrews.*

1. What is the weight in grammes of 100 C.C. of moist air, measured at 15° and under a pressure of 763 millimetres? (Tension of aqueous vapour at 15° = 13 mill.; weight of 1,000 C.C. dry air at 0° and under 760 mill. = 1.3 grammes.)

2. How many grammes of ice would be melted by 1,000 grammes of copper in cooling from 100° to 0°, assuming the specific heat of copper to be 0.095, and the latent heat of water to be 79°?

3. How would you determine the heat produced in the combination of oxygen and hydrogen? Give also a general account of the mode of calculating the result from the experimental data.

4. Describe the characteristic lines of the spectra of potassium, lithium, strontium, and magnesium.

5. How is it shown that there are lines in the ultra violet chemical rays corresponding to the dark lines of the visible spectrum?

6. What is the law according to which gases diffuse through porous septa?

7. Describe the preparation of nitric oxide (nitrogen dioxide), and state the reaction in symbols. Describe also the chief properties of this gas.

8. What reaction takes place when chlorine gas is passed through a strong solution of ammonia?

9. How is the hypochlorous acid gas prepared, and what are its properties?

10. Describe the preparation of the compounds of silicon with chlorine and fluorine, and the compounds which are formed when they come into contact with water.

11. Ten grammes of two solutions, one of hydrochloric acid, the other of hydrocyanic acid, give precipitates with nitrate of silver, weighing respectively 3.3 and 1.2 grammes; what per-centage of the dry acids are present in each solution?

12. What is the composition of the more important ferrous and ferric compounds; and what is the atomicity of iron in these compounds?

13. What are the tests for lime and magnesia?

14. How would you analyse a compound of sulphur, copper, and iron?

15. What are the more important ores of copper and the characteristic tests for that metal?

16. What is the distinction between a monatomic, diatomic, triatomic and hexatomic alcohol? Illustrate your explanation by examples.

17. Write the formulae of the four alcohols (two primary, one secondary, and one tertiary), which are included in the general formula $C_nH_{2n+2}O$.

18. What is the formula of trichloroacetic acid and how is it prepared? State also the reaction which takes place when it is boiled with excess of ammonia.

19. What are the tests for strychnia, brucia, and morphia?
 20. How is the density of a vapour determined?
 21. Give an account of the preparation of metallic magnesium by electrolysis.
 22. Give an account of the laws of induced currents and their application to the construction of Ruhmkorff's machine.
 23. Under what circumstances will a feebly magnetic body assume an equatorial position in the magnetic field?

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CIVIL ENGINEERING.—*Examiner, Professor James Thomson, LL.D.*

FIRST YEAR STUDENTS.

GEOMETRICAL DRAWING.

[NOTE.—The numbers annexed to the several questions are values assigned to them, indicating their relative importance for the examination.]

1. In each of the three figures accompanying Question 1, given the projections $a\ b$, $a'\ b'$ of a straight line—find its traces in each case, and give a brief explanation of your work. [The accented letters in this and in other questions following are to be understood as belonging to the vertical plane of projection according to the mode of notation in Hall's Descriptive Geometry.] (4.)

2. Supposing two planes to be given by their traces, explain how to find the projections of the common section of the planes. To answer this well you should treat of several varieties of cases, and should work out one or two examples. (5.)

3. Assume a plane by its traces, and a point not situated in the plane by its projections: draw the projections of the straight line which would pass through that point and would be parallel to that plane and to the horizontal plane of projection; and then find the vertical trace of that line. If according to your assumed data you find that the required trace would be inaccessible, you should take other data which will suit, and then perform the required work. Give clear explanations. (3.)

4. Given the two projections of a terminated straight line which is not parallel to either plane of projection: required its length. Assume data, and perform the problem; and explain your work clearly. (3.)

5. Find by geometrical construction the angle between a straight line and its isometric projection. (3.)

6. Find by geometrical construction the length of the isometric projection of a straight line of given length; and in connexion with this, explain what is meant by the "*natural scale*" and the "*isometric scale*" in isometric drawing. (4.)

7. Give an account of the progress you have made in the projection or drawing of shadows; and in doing so, mention the nature of the chief problems you have worked out or learned; and give one or two examples with clear explanations. (4.)

8. In reference to perspective drawing, explain the meanings which you think may properly be attributed to such of the following expressions as are properly applicable for conveying correct ideas. If you know of any of them being often inconsistently or unsuitably applied, mention such

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applications, stating why or how they are objectionable. *Point of view. Point of sight. Centre of view. Centre of the picture. Angular perspective. Parallel perspective. Horizon line. Vanishing point.* (4.)

9. Give clear explanations of at least one of the methods taught or practised during the session, for making perspective drawings. Your explanations ought to be accompanied and aided by one or more sketches, or illustrative diagrams. The credit for your answer will be much increased if you give good and clear explanations of several methods. (Value 4 for one method, or 16 for several methods well explained.)

10. Mention what you can recollect of the principles or methods taught in the lectures, for determining in some cases, from knowledge which may often be available as to the forms of objects represented in a true perspective picture, and as to some conditions of position of the picture and the objects, where is exactly the proper point of view in which the eye must be placed relatively to the picture so that a true view may be obtained. (6.)

SECOND YEAR STUDENTS.

SURVEYING, LEVELLING, MENSURATION, &c.

1. If you have a levelling instrument set up in such condition that on being made to revolve slowly round its axis called the *vertical axis*, the bubble remains at the same part of the tube, but not at the middle, being constantly a little too near the end next the object glass; state and explain clearly what is right and what is wrong in the adjustment so far as can be ascertained by the observed facts here mentioned. (3.)

2. If you have a levelling instrument set up with the bubble brought to middle of the tube when the telescope is over one pair of parallel plate screws, and brought to middle when the telescope is over the other pair of parallel plate screws; and if you observe that the bubble comes to middle always when the telescope is turned round the "*vertical axis*" to either of these positions, but leaves the middle when the telescope is reversed end for end by rotation in azimuth through 180° from each of these positions: state and explain what is the fault, or what are the faults, of adjustment which may, from these facts noticed, be known to exist. (4.)

3. Explain clearly what is the nature of the image formed in a theodolite or levelling instrument. What is parallax, and how is it to be avoided in making observations? What are the uses of the longitudinal motions which vary the distances between the object glass and cross fibres, and between the eye piece and cross fibres? (4.)

4. Considering that the curvature of any line situated in a plane and having uniform curvature (or, in other words, the curvature of any circular arc) may be defined as being the angle turned by the curve per unit of length, and that it is convenient to express that angle by the radian as unit of angular quantity; show that the curvature comes in conformity with these expressions, to be expressed by $\frac{1}{r}$ where r is the radius of curvature. (4.)

5. Explain Professor Rankine's method of ranging railway curves by angles at the circumference in the case in which the intersection of the two straight tangents which the curve is to meet is inaccessible, and a transversal is used. (6.)

6. In ranging a curve by the "method of angles at the circumference" (Professor Rankine's method) with some points of the curve determined

on the ground by means of a transversal, if you have ranged and pegged a portion of the curve with the theodolite at one station, and it becomes necessary to move the theodolite to another station on the curve; how do you arrange the theodolite at the new station to give the proper readings for the additional pegs which may be ranged by sights taken from that new station? In answering this you should take into consideration that the commencement of the curve, as also the end of the curve, may or may not be visible from the new theodolite station. (5.)

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amination.*

NOTE.—This examination farther comprised a piece of work in calculating the area of a field shown surveyed in a leaf of a field-book, submitted to the candidates, and in checking the accuracy of the chaining by use of ordinary spirit line measurements. Also the examination comprised practical exercises in handling and using theodolites and other instruments.

SECOND AND THIRD YEAR STUDENTS:

OFFICE AND FIELD WORK.

1. *For Second Year Students only.*—Describe the process of levelling for a longitudinal section for a line of railway. Tell what is meant by the datum line or datum level. Sketch out the form of levelling field book which you prefer to use; and explain the mode of making entries of observations in it, and of deducing by calculations the other requisite entries, checks on arithmetic included. (4.)

2. Describe the chief resemblances and distinctions of construction and adjustment between the ordinary Y theodolite and the transit theodolite. To answer this very well, you ought to touch upon all or nearly all the important adjustments of both instruments. (15.)

3. Explain the main principle of the sextant; that is the principle according to which the angular space on the graduated arc marked as for one degree is less than a real degree. Explain also the construction of the optical square, sketching the arrangement of the mirrors, and the paths of the rays of light, through the instrument, from the two objects viewed. (4.)

4. Why is it that the ordinary uses of a sextant are not vitiated by a multiplicity of images such as are usually seen when a person standing near a looking-glass views in it by reflection, a small object held near the glass in such a position that the rays fall on the glass very obliquely. (2.)

5. For making a survey, when it is wanted to calculate the areas of fields from the field book without having recourse to plotting a map in order to get the areas from it; explain the special measurements which ought to be made in passing from one chain line to the next; and explain how the calculations of offset areas should be made at the place of transition. (4.)

6. If the ground rises between two remote stations so that neither can be seen from the other, though both can be seen from points on the hill between them; how may you ordinarily range by aid of a theodolite the straight line from station to station? (3.)

7. If in the development of the intrado of an oblique bridge the stones of the arch, which do not extend to either of the oblique faces, are marked out by rectangles, the extradosal faces of the same stones as exhibited in the development of the extrado will not be rectangles:—Explain why this is so; and explain what will be the forms of the developments of the extradosal faces of these stones. (4.)

8. Explain clearly how to draw the outlines of the development of the intrado or soffit of an oblique arch. A good diagram or hand sketch illustrative of, or serving as part of your explanation is desirable. (4.)

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amination.

9. For Third Year Students only.—For an oblique bridge show how to draw accurately the curved line of a face joint, or its projection on a plane parallel to the oblique face. In doing this, you should show how the same curve may be continued beyond the intradosal and extradosal limits of the arch face. (5.)

THIRD YEAR STUDENTS.

CIVIL AND MECHANICAL ENGINEERING AND ARCHITECTURE.

1. In respect to the Grecian Doric, the Ionic, and the Corinthian Orders of Architecture, give descriptions and hand sketches sufficient to distinguish these orders from one another and from the other orders or varieties of Grecian and Roman Architecture. (5.)

2. Explain what is meant, in reference to the designing and stability of ships, by the terms *displacement*, *metacentre*, *centre of buoyancy* and *righting moment*; and explain how the "*stiffness*" of the ship depends on the vertical distance apart of the metacentre and centre of gravity of the ship. (5.)

3. Distinguish between the flow of water through orifices, and its flow through pipes, troughs, or canals, showing why in the one case very exact formulae may be attainable, for connecting the flow with the form, dimensions, and position of the water way, and with the *fall of head* in the advancing stream; while no such exact formulae should be expected in the other case. (It is to be understood that the word "*head*" is here employed to signify not a quantity but a position, namely the level of the top of a column of statical water having its base at the level of a particle of the flowing water and having at base the same pressure as the flowing particle has.) (3.)

4. Give some explanations of the views taught by Rankine on the evil influence of supposed inconsistency between theory and practice in mechanics. (3.)

5. In practical hydraulics, in reference to the flow of water through orifices, authors frequently speak of the "*theoretic velocity of the water*," and then multiply this by the area of the orifice, to find what they call the "*theoretic discharge*," and multiply this again by a coefficient sometimes called the "*coefficient of contraction*," and sometimes called the "*coefficient of discharge*," to get the "*actual discharge*." Give further explanations as to the meanings of these terms, or as to their usual modes of application, and discuss whether they tend to harmony or to inconsistency between theory and practice; and whether the usual treatment of the subject in connexion with these terms is good or not. (5.)

6. Give as full and as clear an account as you can of all the important practical operations that you know of and can at present recollect, which are in common use for the construction of steam boilers, in so far as the adaptation and the connecting in strong and steam-tight manner of the boiler plates is concerned. (4.)

7. Taking the modulus of elasticity of wrought iron (in pounds per square inch) at 29,000,000, find the elongation due to a pull of 3 tons, in a wrought iron tie bar, of round iron, 1 inch in diameter, whose length is 95 feet. (3.)

8. Explain the meanings of the following terms in Architecture:—Volute, Plinth, Pediment, Ogee, Cavetto, Mullion, Transom, Tracery, Tudor Arch, Spandrel, Hood Mould. (4.)

9. Give an account of the Perpendicular style of Architecture in Eng-

land, and state the period to which it specially belonged, and mention the style which immediately preceded it. (4.)

10. Explain how there can be a push crossing a pull, which shall together be identical with a shear stress. (3.)

11. Explain how it is that a long longitudinal groove, in a round iron shaft, or a long longitudinal imperfection of welding will weaken the shaft very much in respect to resistance to torsion, though it may weaken the shaft very little for longitudinal push or pull. (3.)

12. Explain that similar pieces of the same kind of material, having the same stress, each as another, at all homologous points, must receive from without similar systems of forces which have to one another the ratio of the squares of the homologous linear dimensions. Apply this principle to the solution of the following question:—If an iron tank be just strong enough to bear with due safety the load of the water which will fill it; and if another tank be executed according to the same drawings, but on a larger scale; all linear dimensions being increased in a constant ratio; will the new tank be of suitable strength, or more or less than strong enough for bearing with due safety the load of water which would just fill it? (5.)

13. If you know the modulus of elasticity of the material of a beam, and the moment of inertia of its cross section, how can you find the bending moment which will produce a specified curvature in the beam as a whole or at any particular place in the length of the beam? Explain whether or not it is necessary in this case to have the bending restricted within elastic limits if an answer is to be derivable from the data. (4.)

14. In respect to the transverse strength of rectangular beams, explain the meaning of what is commonly called the *Modulus of Rupture*: also explain what is the *coefficient of rupture* which has been referred to in the lectures as used in Mr. B. B. Stoney's Treatise: and show how if either of these were given for the material of a rectangular beam, and if the breadth and depth of the beam were known, you could compute the bending moment which might be expected to break the beam. (5.)

NATURAL PHILOSOPHY.—*Examiner, Professor Everett, M.A., D.C.L.*

EXPERIMENTAL PHYSICS.

1. A uniform bar, 6 feet long, weighing 2 lbs. per foot, has a weight of 10 lbs. hung from one end. Find the point about which it will balance.

2. With what velocity must a body be thrown upwards that it may ascend to a height of 160 feet? Find the spaces described in the first and last seconds of the ascent.

3. One body is moving through space with uniform velocity in a straight line. A second body is moving in a straight line with velocity continually diminishing. A third body is moving with uniform velocity in circular path. What inferences can be drawn regarding the forces which act upon these bodies respectively?

4. A gallon of pure milk, of specific gravity 1.03, is mixed with 2½ pints of water. What is the specific gravity of the mixture?

5. A solid glass ball, of specific gravity 2.8, and weighing 5 oz., is suspended in water by a thread. Find the force which the thread has to sustain.

6. At a time when the barometer stands at 30 inches, a portion of air is enclosed in a bent tube by means of a quantity of mercury which fills the bend. That end of the mercurial column which is in contact with the

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enclosed air, stands 10 inches lower than the other end, which is exposed to the atmosphere. Compare the pressure of the enclosed air with that of the external air, supposing the temperature to be uniform.

7. A copper ball weighing 20 oz., is heated to a temperature of 100° C., and then immersed in 100 oz. of water at 0° C. What will be the resultant temperature, the specific heat of copper being .092?

8. Define "relative humidity" and "dew-point"; and explain briefly the use of the wet-and-dry bulb hygrometer.

9. A common A tuning fork makes 440 complete vibrations per second. Compute the wave-length of its note in air in which the velocity of sound is 1,100 feet per second, and in air in which the velocity is 1,600 feet per second.

10. A musical string, when lightly touched at one fourth of its length from one end, and thus made to vibrate in four segments, yields the note A of 440 vibrations. What is the fundamental note of the string? What will the fundamental note be changed to, when the stretching force is increased fourfold?

11. State (with an illustrative diagram) the "law of sines" in refraction; and point out the circumstances under which total internal reflection occurs.

12. What must be the shape of a lens that it may increase the convergence of an incident pencil of rays; and what are meant by conjugate foci of a lens?

13. Describe a mode of giving a positive charge to an insulated conductor, by means of a piece of sealing wax which has been rubbed with flannel.

14. What will be the result of holding a Leyden jar by the knob, and applying the outer coating to the positive conductor of an electrical machine in action? Will the person so holding it receive a shock when he sets it on the ground? What will be the effect of hanging a Leyden jar by its knob (or by a hook in place of a knob) from the positive conductor, supposing the outer coating to be perfectly insulated?

15. Describe the construction of the needle and coil in an astatic galvanometer; and point out the advantage of the astatic arrangement.

16. State the quantitative laws of electrolysis.

NATURAL HISTORY.—*Examiner, Dr. Cunningham.*

BOTANY.

[Senior Students omit questions 1 and 6. Junior Students omit questions 5 and 10.]

1. Give a short account of the nature of the following substances met with in the vegetable tissues:—Starch, Alumen, Protoplasm, Chlorophyll, Mannite.

2. Mention the names of the groups into which climbing plants are divided by Darwin, and give examples of each group.

3. Mention some of the more clearly ascertained facts regarding the circulation of the sap.

4. Describe the structure and development of a pollen grain.

5. Give the names and characters of the principal forms of achenial fruits.

6. State the characters of Orchidaceae.

7. Give the general characters of Umbelliferae, and the names and distinguishing marks of the sub-orders, with examples of some of the genera contained therein.

8. Describe the structure of the flower in *Fumaria*.
9. Mention some of the more important points in the structure of the flower in the following genera of *Ranunculaceae*:—*Clematis*, *Anemone*, *Ranunculus*, *Helleborus*, *Aconitum*, *Delphinium*, *Aquilegia*.
10. Refer to their natural orders the following genera:—*Allium*, *Anagallis*, *Alchemilla*, *Calluna*, *Cerastium*, *Eschscholtzia*, *Euphrasia*, *Hieracium*, *Pinguicula*, *Mentha*, *Galanthus*, *Crocus*, *Sparganium*.

CHEMISTRY.—*Examiner, Dr. Andrews.*

PRACTICAL CHEMISTRY.

1. Assuming glucose ($C_6H_{12}O_6$) to be wholly converted into alcohol and carbonic acid in the process of fermentation, how many cubic centimetres of dry carbonic acid gas at 0° and 760 mil. would be produced by the fermentation of 1 gramme of the sugar?
2. 10 C.C. of diabetic urine gave by fermentation 210 C.C. of carbonic acid gas at 20° C. and under a pressure of 720 mil.; how many grammes of anhydrous glucose ($C_6H_{12}O_6$) were contained in 1000 C.C. of the urine? (Coefficient of expansion of CO_2 = 0.0037; tension of aqueous vapour at 20° = 17 mil.)
3. Describe the preparation of the solution of neutral mercuric nitrate for Liebig's method of estimating urea, the mode of determining its strength by means of urea, and its application to the quantitative determination of the urea in urine.
4. What are the tests (dry and moist) for the following metals:—Lead, bismuth, tin, and antimony.
5. How would you ascertain the per-centage of silver in an ordinary silver coin?
6. What are the distinguishing reactions of blood?
7. How is the creatinine separated from the urine?
8. What are the tests for salicine, morphine, strychnine, and brucine?

MIDWIFERY AND DISEASES OF WOMEN AND CHILDREN.—*Examiner, Dr. R. F. Dill.*

1. Wherein do the measurements of the inlet and outlet of the female pelvis agree and differ?
2. What advantages accrue from a perfect recognition of the curve of Carus?
3. Wherein does the uterus in an advanced state of impregnation differ from the same organ in the virgin condition?
4. How is the normal term of gestation, and the date at which parturition may be expected, to be calculated and determined?
5. State the diagnosis in breech presentations. What does the danger to the life of the child arise from? How is this danger to be avoided?
6. What are the signs of the existence of twins during gestation, the detection during parturition, or when the first child is born? What is the management in twin cases?
7. What is the most common source and treatment of retention of the placenta?
8. What are the hæmorrhages which occur in the first two stages of labour? Give the distinguishing symptoms and the treatment applicable to each.

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9. Under what circumstances may the membranes be punctured and the liquid amnii be evacuated with propriety?
10. How is metritis to be distinguished from after pains? What is the management and treatment in each case?

MEDICAL JURISPRUDENCE.—*Examiner, Professor Hodges, M.D., F.C.S.*

1. Describe the process employed in the electrolysis of solutions supposed to contain arsenic.
2. How is the amount of arsenic in a solution estimated?
3. In what time may all traces of the following poisons be eliminated from the body?—Antimony, arsenic, lead, mercury.
4. State the poisonous dose of the following substances:—Phosphorus, tartar emetic, sulphate of copper, opium, extract of belladonna, strychnine, cyanide of potassium.
5. What chemical antidotes are used in the treatment of poisoning by the following substances?—Arsenic, copper, lead, prussic acid, corrosive sublimate.
6. Describe the postmortem appearances observed in poisoning with corrosive sublimate.
7. State the treatment to be adopted in poisoning with strychnine.

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MATRICULATION EXAMINATION, OCTOBER, 1873.

ENGLISH LANGUAGE AND LITERATURE.—*Examiner, Professor Yonge.*

1. From what languages is the English language chiefly derived? Point out some instances of the influence which each of those different languages have exerted on the English language as it exists now.
2. In what points do an English verb and noun differ from a Latin verb and noun?
3. What is the difference in the qualities required from a historian and a dramatist; and, generally, from a prose writer and a poet?
4. What is meant by strong and weak verbs?
5. Give a brief analysis of any work of first-rate excellence, in either prose or poetry (a single play of Shakespeare will be sufficient) which you have lately read.

Write an Essay (not exceeding three pages) on the character of Edward I.

MATHEMATICS.—*Examiner, Professor Purser.*

ARITHMETIC.

1. Coals are thirty shillings a ton, how many pounds and ounces are there in a pennyworth?
2. A can reap a field in 13 hours, B in 11 hours; find how long the two together will take.
3. Reduce 3127 francs 52 centimes to English money. Exchange being at 24*l*. 4*s*. per pound sterling.

4. Reduce $\frac{37}{42}$, $\frac{11}{15}$, $\frac{49}{35}$, $\frac{3}{10}$ to fractions having the same denomi-

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tion Ex-
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nator.

Divide 135.315 by 4.85 and prove the result by vulgar fractions.

5. A ladder 30 feet high is placed against a wall, the bottom of the ladder being drawn 5 feet out from the wall, find how high the top reaches.

EUCLID.

1. Define a *triangle*, a *rectangle*, a *circle*, and a *right-angle*.
2. At a given point in a given straight line, make a rectilinear angle equal to a given rectilinear angle.
3. The complements of the parallelograms about the diagonal of a parallelogram are equal to one another.
4. In an obtuse angled triangle the square of the side opposite the obtuse angle exceeds the sum of the squares of the sides containing that angle by twice the rectangle under either of them and the interval between the obtuse angle and the foot of the perpendicular let fall upon that side from the opposite angle.

ALGEBRA.

1. Simplify the expressions—
 $(a+b+c)(b+c-a)(c+a-b)(a+b-c)(a-x)^3-(x-3)(x-1)^3$.
2. Find the greatest common measure of x^3-1 and x^3+x-2 .
3. Solve the following equations:—

$$(\alpha) \frac{x-\frac{1}{2}}{x-\frac{3}{2}} = \frac{x-\frac{1}{2}}{x-\frac{3}{2}}.$$

$$(\beta) \frac{\frac{x+1}{2} + \frac{x+3}{3} + \frac{x+3}{4}}{\frac{x-1}{2} + \frac{x-3}{3} + \frac{x-3}{4}} = 415.$$

$$(\gamma) \sqrt{1+x} + \sqrt{1-x} = \frac{8}{5}.$$

PEEL PRIZE EXAMINATION.

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tion.

GEOMETRY.—Examiner, Professor Purser.

1. The rectangle under the diagonals of a quadrilateral inscribed in a circle is equal to the sum of the rectangles under the opposite sides.
2. Given a circle and a point *A*, a second point *B* can always be found such that the distance of any point on the circle from *A* varies as its distance from *B*.
3. A line is cut harmonically by the circle pole and polar.
4. Show that the side and diagonal of a square are incommensurable.
5. Four lines are drawn forming four triangles; show that the four circumscribing circles pass through a common point.
6. Describe a circle cutting three given circles orthogonally.

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tions.

7. A, B, C are three points on one line; A', B', C' three points on another; show that the intersections of AB' and $A'B$ of BC' and $B'C$ of CA' and $C'A$ lie in directum.

8. Draw a line across the space formed by two intersecting circles through a given point inside so that the areas of the two parts into which this space is divided shall be most unequal.

9. If $ABCD$ and $A'B'C'D'$ are two sets of four points so disposed that any two points of the first set, together with two corresponding points of the second set lie on a circle; show that if the first set of points lie on a circle, the second set do so also.

10. Find a point P in the plane of a triangle ABC such that $\alpha.PA^2 + \beta.PB^2 + \gamma.PC^2$ may be least where α, β, γ are the areas of the triangles BPC, CPA, APB .

SCHOLARSHIP EXAMINATION, OCTOBER, 1873.

LITERARY SCHOLARSHIPS.—FIRST YEAR STUDENTS.

GREEK.—*Examiner, Professor Mac Donall.*

Translate the following passage from the *Catochus* of LUCIANUS:—

ΚΑΘΩ. ἄρα δὲχθ¹ βραδύων; οὐχ ὁρᾷς ὅπως ὁ τέλεινος ἐπεσχευῖται δόσαν ἀρεταίῃς πρὸς ὀλίγον; θαῦμα γοῦν ἔχει με, εἰ μὴ ἀγαπητὴ καὶ σοὶ ἡ διατριβή. ΜΙΚ. ἄκουσον, ὦ βαλάντιον Μοιρῶν! οὐ πᾶν με ἡ τοῦ Κλέωντος ἐσφραίνεται δουρεὶ, τὸ ἐπισχευῖσθαι ἔτι “πύματον” ἐγὼ τὸν Οὐτιν κατέδαμαι,¹ ἵππεϊ, ἴν² τι γοῶν πρῶτον ἂν τι πύματον,³ οὐ αὐτοὶ ὀδόντες με περιμένουσιν. ἄλλως δὲ οὐχ’ ἔμοιμα τίμαι τοῖς τῶν πλοσίων⁴ “ἐκ διαμέτρου γὰρ ἡμῖν οἱ βίαν,” φασιν. ὁ μὲν γὰρ τέλεινος, ἐσθλαίμων εἶναι δοκῶν παρὰ τὸν βίον φοβηρὸς ὅ’ ἀπασι καὶ περιβλεπτοῖς, ἀπολιπὼν χρυσὸν τισσοῦσθαι καὶ ἀργύρων καὶ ἰσθῆτα καὶ ἱπποὺς καὶ δούλους καὶ παιδῶς ἀραίους⁵ καὶ γυναικας ἐμάρφους εἰκότας⁶ ἡνιῶτα⁷ καὶ ἀποσπώμενος αὐτῶν ἤχθετο. οὐ γὰρ αὐτῷ⁸ ἔτιως καθόπιρ ἔξω τινι προσίχεται τοῖς τοιαύτοις ἡ ψυχὴ καὶ οὐκ ἐθέλει ἀπαλλάττεσθαι ῥηδῶς ἀπὸ αὐτοῖς πύλαι προσεγεγραμῆαι⁹ μύλλον δὲ ὥσπερ ἀβήκητος¹⁰ τις οἶκος ὁ ἑσμός ἐστιν, ὃ δεῖσθαι¹¹ ἐμβέβηκεν αὐτοῖς. ἀμύλη,¹² κἂν ἀπάγῃ τας αὐτοὺς μετὰ βίαν, ἀναγκάζουσι, καὶ ἄλλα ὄντα θρασείας δειλῶς¹³ πρὸς ταύτην ἐμβέκουται τὴν ἐπὶ τὸν “ἄδην φέρουσιν” ὀδόν. ἐκαστρίφονται γοῦν εἰς τοῦτόν, ὡς περ οἱ δουρίωτες,¹⁴ καὶ κύρηνθιν ἀπαβλέπειν τὰ ἐν τῷ φρενὶ βούλονται. εἰς ὁ μάταιος ἐκείνος ἱππεὺς καὶ παρὰ τὴν ὀδὸν ἀποδιδράσκων¹⁵ καὶ ἰσταθῆαι καταλιπαρῶν.¹⁶ ἐγὼ δὲ, ἄντι οὐδὲν ἔχων ἐνέχων¹⁷ ἐν τῷ βίῳ, οὐκ ἀγρὸν οὐ συνοικίαν οὐ χρυσὸν οὐ σκεῦος οὐ δόξαν οὐκ εἰκότας,¹⁸ εἰκότας¹⁹ εὐζυνος²⁰ ἦν, καὶ, ἱππεὶς μόνον ἡ “Ἄτρεπος” ἐντυσὲ μοι, ἄσμενος²¹ ἀπερήψας τὴν σμίλην καὶ το κάπτεμα,²² (κηπίδα γὰρ τινὰ ἐν ταῖς χερσὶν ἔχων,) ἀναπηδῆσας εὐθὺς ἀνυπόδητος²³ ἐπὶ τὴν μάκωνήριον²⁴ ἀπονηφόμενος,²⁵ ἐπόμεν²⁶—μύλλον δὲ ἡρώμεν—εἰς τὸ πρῶτον ἑρῶν, οὐδὲν δὲ με τῶν κατόπιν²⁷ ἐκίστασι καὶ μετεκάλει. καὶ νῦν δ’ ἤδη καλὰ τὰ παρ’ ὁμῖν πάντα ἔρῳ. τὸ γὰρ ἰστορίαν ἔπασιν εἶναι καὶ μετένα τοῦ πλησίον διαφέρεσθαι²⁸ ὑπερῆστον ἱστοίᾳ δοκεῖ. τεμαίρομαι²⁹ δὲ μετ’ ἀπαιτεῖσθαι χρεὶα τοὺς ἀφελόντας ἱσταθῆαι μετὰ φόρου ὑποτάλιν, τὸ δὲ μέγιστον, μετὰ ῥιγοῦν³⁰ τοῦ χαμῶνος μετὰ νοσὶν μετ’ ὅπ³¹ τῶν δυνατωτέρων βασιζέσθαι.³² εἰρήνη δὲ πᾶσα καὶ τὰ πράγματα ἐς τοῖς καλὴν ἀναστραμμένα³³ ἡμεῖς μὲν γὰρ οἱ πύοντες γελῶμεν, ὀνοῦμεν δὲ καὶ αἰρωμένους³⁴ οἱ πλοσίοιοι. ΚΑΘΩ. πάσαι σὺν σε, ὦ Μικέλλε! γελῶντα ἰώρων³⁵ τί ὅ’ ἦν ὅ σ μάλιστα ἔκινε γελῶν; ΜΙΚ. ἄκουσον, ὦ τιμωτάτῃ μοι θιῶν! παροικῶν ἄνω τυράννῳ πᾶν ἀκριβὲς ἰώρων τὰ γινόμενα παρ’ αὐτοῦ, καὶ μοι ἰδοὺς τότε ἰσθῆτας³⁶ τις εἶναι. ἐπεὶ δὲ ἀπέβανον, αὐτὸς τε παγγέλοις ὤρεθ³⁷ μοι ἀποδυσόμενος³⁸ τὴν τρυφὴν ἐξέμαστο³⁹ ἐνί μύλλον καταγίλων, ὡς καθάρμα⁴⁰ ἐκβέβηται⁴¹ ἀπὸ τῆς ἐκίσεως τεμαίρομενος αὐτοῦ τὴν ἐσθλαίμων καὶ μακαρίζων ἐπὶ τῷ αἵματι τῶν ἐν τῷ Λακωνικῷ θαλάττῃ κοχλίδων.⁴²

Scholarship
Examina-
tions.

1. Parse fully and accurately every word to which the figure 1 is annexed. *Appendix, No. 1.*
2. Derive or compound every word to which the figure 2 is annexed. *Scholarship Examinations*
3. Supply ellipses and explain any noticeable constructions or idioms.
4. Explain briefly the references in lines 4, 5, 6, and in the last line.

Translate the following unprepared passage :—

ὁ δὲ Συνερίπας εἶπεν· “ ἄσπευδεν ἂν εἴη τοιαύτην ἐπαρχίαν πάσης ἐνείκῃς γίγνουσαν καὶ νοημάτων μὴ φιλόσοφον βασιλεία ἐκτεῖσθαι. ἐνταῦθα γάρ, μὴ τοσούτου βασιλείως ἱππευαυούντος τοῖς πράγμασιν, οὐ δὲ τινα τῶν ἀπάντων διατρέβειν. ἔμαθον γὰρ ὡς οὐδὲν οἱ βασιλεύοντες τῷ θυμῷ τοῦ καυστικῆς πυρὸς διαφέρουσι. καὶ ἴδῃ γε τοσούτοις καὶ φιλοσόφους εἶναι ὅσον δυνατὸν καὶ φιλοσόφους ἀνδρας προσημύλιν καὶ τούτων ἀκούων, ὥσπερ Ἀλέξανδρος, ἵνα μὴ τιαν ἐπιβόλας περὶ τὸ ὑπήκουον ἀμώτοιαι τῶν ἰδιωτῶν ἀναδραχθῶσιν, εἰ τοῖσιν, ὃ βασιλεῦ! καθὼς σοι ὑπαγγέλλομαι, τίλειον τὴν υἱὸν σου ἀποκαταστήσω φιλόσοφον, καὶ τὴν σὴν βασιλείαν ἐπάναγκες. ἔσται φιλοτιμήσασθαι ἐπ’ ἐμῇ.” ὁ δὲ βασιλεὺς εἶπε πρὸς ταῦτα· “ ὅ τι ἂν ᾖ σοι τὸ πεθοῦμαι, εἴπερ ὑπάρχει μοι βέλδιον, τοῦτό σοι δώσω.” ὁ δὲ Συνερίπας ἀκούσας ἀπεκρίνατο· “ ἐν παραδείγματι ἀκούων, ὃ βασιλεῦ! ὕμνῳ σὲ παρὰ τῶν οὐ βέλδιος ἔχεις λαβεῖν, μὴδ’ αὖ σὲ ἐνέργῳ δοῦναι θελήσης.” τότε ὁ βασιλεὺς τῷ λόγῳ τούτῳ συγκαταβὰς μεγάλαις ἑλπίσι καὶ χροσταις τὸν φιλόσοφον ἐπληροφόρησε.

LATIN.—*Examiner, Professor Nesbitt.*

1. Translate, with brief notes :—

1. Hoc iudicium et promulgata lex exereuit civitatem : ab externis armis otium fuit. Cum velut victores tribuni percussis patribus Caesonis exilio prope perlatum esse crederent legem, et quod ad seniores patrum pertineret cessassent possessione rei publicae, iuniores, id maxime quod Caesonis sodalium fuit, auxere iras in plebem, non minuerunt animos, sed ibi plurimum profectum est, quod modo quodam temperare impetus suos. Cum primo post Caesonis exilium lex coepta ferri est, instructi paratique cum ingenti clientium exercitu sic tribunos, ubi primum submoventes praebere causam, adorti sunt, ut nemo unus inde praecipuum quicquam gloriae domum invidine ferret, mille pro uno Caesones exstitisse plebes quereretur. Mediis diebus quibus tribuni de lege non agerent, nihil eisdem illis placidius aut quietius erat : benigne salutare, adloqui plebis homines, domum invitare, adesse in foro, tribunos ipsos cetera pati sine interpellatione concilia habere, numquam ulli neque publice neque privatim truces esse, nisi cum de lege agi coeptum esset ; alibi popularis iuventus erat. Nec cetera modo tribuni tranquillo peregere, sed refecti quoque in insequentem annum. Ne voce quidem incommoda, neque ut ulla vis fieret, paulatim permulcendo tractandoque mansuefecerant plebem.

2. Translate and explain :—

(a.) Partem militum locis circa densa obrita virgulta obscuris subsidere in insidiis iussit.

(b.) Adco id gratum plebi fuit, ut id modo sciscerent iuberentque, ut senatus decerneret qui Romae regnaret.

(c.) Bis deinde post Numae regnum clausus fuit, semel T. Manlio consule post Panicum primum perfectum bellum, iterum, quod nostrae aetatis dii dederunt ut videremus, post bellum Actiacum ab imperatore Caesare

Augusto pace terra marique parita. (What evidence does this passage afford as to the time in which the first book was written?)

(d.) Igitur tribuni, ut impediendae rei nulla spes erat, de proferendo exercitu agere.

(e.) Invenio apud quosdam, idque propius fidem est, a quaestoribus Caesone Fabio et L. Valerio diem dictam perduellionis damnatumque iudicio populi.

(f.) Omnino amicitiae corroboratis jam confirmatisque et ingenii et aetatis judicandae sunt: nec si qui inerte aetate vacandi aut piae studiosi fuerunt, eos habere necessarios quos tam eodem studio praeditos dilexerunt; isto enim modo nutrices et paedagogi jure vetustatis plurimum benevolentiae postulabant; qui negligendi quidem non sunt, sed alio quodam modo: aliter amicitiae stabiles permanere non possunt.

3. Translate into Latin prose:—

There can be little doubt that Rome, like the Greek cities, was at first governed by Kings, who ruled by the help of a Senate and an Assembly of the People. But the Roman Kings, unlike those in Greece, were not hereditary, nor were they even chosen from any particular family. The legend gives us the names of seven Kings, and it is most likely that the two or three last names on the list are those of real persons. These are the dynasty of the Tarquins, about whom there have been many opinions, but who most likely were Etruscans, and who seemed to have adorned Rome with buildings and works of Etruscan art. At all events they greatly extended the power of Rome, so that she became the greatest of all Latin cities. The last King, Lucius Tarquinius, called the Proud, is said to have acted as a cruel tyrant, and to have no regard for the laws of the Kings who had gone before him. He was accordingly driven out with his family, and the Romans determined to have no more Kings, and they ever after hated the very name of King. This is said to have happened B.C. 510, about the same time when the tyrant Hippias was driven out of Athens.

Translate with brief notes:—

1. Inter quas Phœnissa recens a vulnere Dido
Errabat silva in magna: quam Troius heros
Ut primum iuxta stetit agnovitque per umbram
Obscuram, qualem primo qui surgere mones
Aut videt aut videre putat per nubila Lamea,
Demisit lacrimas, dulcique adfatus amore est:
"Infelix Dido, verus mihi nuntius ergo
Venerat extinctam ferroque extrema secutam?
Funeris heu tibi causa fui? Per sidera iuro,
Per superos, et si qua fides tellure sub ima est:
Invitus, regina, tuo de litore cessi.
Sed me iussa deum, quae nunc has ire per umbras,
Per loca senta situ cogunt noctemque profundam,
Imperiis egere suis; nec credere quivi
Hunc tantum tibi me discessu ferre dolorem.
Siste gradum, teque adspectu ne subtrahes nostro.
"Quem fugis? extremum fate, quod te alloquor, hoc est."
Talibus Aeneas ardentem et torva tuentem
Lenibat dictis animum, lacrimasque ciebat;
Illa solo fixos oculos aversa tenebat,
Nec magis incepto vultum sermone movetur,

Quam si dura silex aut stet Marpesia cautes.
Tandem corripuit sese, atque inimica refagit
In nemus umbriferum, coniuq ubi pristinus illi
Respondet curis aequisque Sychaeus amorem.

2. Me fabulosae Volture in Appulo
Altrici extra limen Apuliae
Ludo fatigatamque somno
Fronde nova puerum palumbes.

Texere, mirum quod foret omnibus,
Quicumque celsae nidam Acherontiae
Saltasque Bantinos et arvom
Pingue tenent humilis Forenti,

Ut tuto ab atris corpore viperis
Dormirem et ursis, ut premerer sacra
Lauroque conlataque myrto,
Non sine dis animosus infans.

Vester, Camenae, vester in ardnos
Tollor Sabinos, seu mihi frigidum
Praeneste seu Tibur supinum
Seu liquidas placere Balae.

Vestris amicum fontibus et choris
Non me Philippis versa acies retro,
Devota non extinxit arbor,
Nec Sicula Palinurus unda.

Utouque mecum vos eritis, libens
Insanientem navita Boepporum
Tentabo et urentes harenas
Litoris Assyrii viator,

Visam Britannos hospitibus feros
Et lactum equino sanguine Concanum,
Visam pharetratos Gelonos
Et Scythicum inviolatus amnem.

3. Nostra quoque ipsorum semper requies sine ulla
Corpora vertantur, nec, quod fuimusve sumusve,
Cras erimus. Fuit illa dies, qua semina tantum
Spesque hominum primae materna habitavimus alvo.
Artifices natura manus admovit, et angli
Corpora visceribus distentae condita matris
Noluit, eque domo vacuas emisit in auras.
Editus in lucem jacuit sine viribus infans;
Mox quadrupes rituque tulit sua membra ferarum,
Paulatimque tremens et nondum poplite firmo
Constitit, adjutis aliquo conamine nervis.
Inde valens veloxque fuit, spatiumque juventae
Transit, et emensis medii quoque temporis annis
Labitur occiduae per iter declive senectae.
Subruit haec aevi demoliturque prioris
Robora; fletque Milton senior, cum spectat inanes
Illos, qui fuerant solidorum mole tororum
Herculeis similes, fluidos pendere lacertos.
Flet quoque, ut in speculo rugas aspexit aniles,

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tions.

Tyndaris, et secum, cur sit his rapta, requirit.
Tempus edax rerum, tuque invidiosa vetustas,
Omnia destruitis, vitæque dentibus ævi
Paulatim lenta consumitis omnia morte.

Translate into Latin verse :

But he's the Tityus, who is robbed of rest
By tyrant passion preying on his breast.
The Sisyphus is he whom noise and strife
Seduce from all the soft retreats of life,
To vex the government, disturb the laws,
Drunk with the fumes of popular applause :
He courts the giddy crowd to make him great
And toils in vain to mount the sovereign seat.
Thus still to aim at power and still to fail,
Ever to strive and never to prevail ;
What is it but in reason's true account
To heave the stone against the rising mount ?

HISTORY.—*Examiner, Professor Yonge.*

1. In what sense was William the First called the Conqueror, and his accession to the English throne called the Conquest ?
2. What continental dominions were possessed by any kings of England between 1066 and 1509. Under what circumstances was each acquired; and, if any of them were at any time lost, what circumstances led to the loss?
3. State and examine the principal provisions of Magna Charta; and the events which led to its concession.
4. Give some account of six of the following battles :—Dun, Taillebourg, Evesham, Falkirk, Sluys, Najara, Verneuil, Towton, Barnet, Stoke.
5. Relate the circumstances which led to the deposition of Richard II.
6. Examine the claim of Edward III. to the throne of France.
7. In a short essay, examine the probable consequences to England, if the English kings had succeeded in permanently establishing their authority over France.

SECOND YEAR STUDENTS.

GREEK.—*Examiner, Professor MacDonall.*

Translate perspicuously these strophes from the *Electra* of EURIPIDES :—

Ἰλίδην δ' ἰκλόν' τινος ἐν λυγρίνῃ
Ναυπλίῃσι βιβῶτες
τῆς σῆς, ὦ θείας παῖ!
κλεινὸς ἀσπίδος ἐν κέλερ
τοιαῖα σήματα δέματα
φρικτὰ τετέχθαι
περὶδῶρ μιν ἴσους ἔδρε
Περσὶα λαμοσύμην ὑπὲρ
ἄλλος ποταμοῖσι παδύλοισι φέων
Γεργένος ἰσχυρὸν Διὸς ἀγγέλερ σὺν Ἑρμῇ
τῇ Μαιᾷσι ἀγορῇσι κούρῃ·

ἐν δὲ μέσῳ ἐπ' ἔλαμψε σάκε φάειων
 κέλεος ἀέλιου
 ἵπποις ἄμ' πτεροίσσας
 ἀστρων τ' ἀβήρα χαροί
 (Πλειάδες Ὑάδες) ἑταροσ
 ἄμασι τροπαίου.
 ἐπεὶ δὲ χρυσαστόφῳ κράνει
 σφίγγας διωξὶν ἀάδισαι
 ἄγραν φέρουσαι. περιπλήρη δὲ κῆτα
 πύρρηντος ἱσπευθεὶ θρόμῳ λίσσας χαλαῖς
 Πειρηνάων ὁρᾶσα πᾶλλον.
 ἄμασι δ' ἐν φανίῳ τετραβάμονες ἵπποι ἵπταλλου,
 κελαινὰ δ' ἄμφι νῦθ' ἵτε κόινς.
 τοιῶνδ' ἄνακτα δοριπτόντων
 ἱεανν ἀνδρῶν, Τυρταρί,
 σά ληξια, κακέρρων κέραι
 τοιγάρ σὶ ποτ' οἶσανίδαι
 πέμψουσιν θανάτους· σὸν δ'
 ἐτ' ἐπε φόνου ὑπὸ δῖραν
 ὄφρα μαι αἶμα χεῖν σιδήρῳ.

ἀντ. Appendix,
 No. 8.
 Scholarship
 Examinations.

In concise notes explain allusions in this passage, specify the various metres, elucidate rare or difficult constructions, and suggest emendations where they may appear requisite.

Translate the following unprepared passage:—

δεῖ καὶ τοὺς νόμους τῆς πατρίδος καθέπερ τινας θεοὺς δευτέρους συντηρεῖν, εἰ καὶ
 παραβαίνειν τις αὐτοὺς ἢ νουθετοῦν ἐπιχειρεῖν, σπουδῇ πάσῃ κωλύοντα καὶ πάντα
 τρόπον ἐναντιοτάμενον. οὐ γὰρ ἀγαθὸν ἐπιτήδευμα πόλει δι' ἀτιμίας ἀγόμενοι οἱ νόμοι
 καὶ τὰ νεία προκρινόμενα τῶν παλαιῶν. ἔθνη καὶ τῶν φηρισμάτων καὶ τῆς παραβίβρου
 ταύτης καινοεργίας ἐκείνων τοὺς αἰσθητότερον ἐπὶ τοῦτ' ἰδούτας. ἀποδίδωμαι γούν
 ἔγωγε καὶ τὸν τῶν Λακωνῶν νομοθέτην Ζόλιππον, ὃς ἐνομοθέτησε τὸν καὶ τὸν εἰσοίσαντα
 νόμον βρόχου περιαιρμένον τῇ τραχέει τοῦτο ποιῶν, ὡς ἀκαρπὶς οἰκιστοὶ πηγίς, εἰ μὴ
 μάλιστα σφέδρα λουσιπιδῶς ἐπὶ κοινῇ παραδιαιλλέμενα τὴν ἐξ ἀρχῆς τῆς πολιτείας κατά-
 στασιν. οὐδὲν δ' ἦν τῶν νόμων καὶ τὰ ἔθνη φυλακτικὸν τὰ γε ἔντες πάτρια καὶ
 τάχα που πρᾶσιότερα καὶ τῶν νόμων αὐτῶν τὰ δι' ἡμετέρας καὶ προῖε τὰ νῦν εἰς
 ἡμᾶς εἰσπηγμένα πάλιν οὐχὶ πάτρια ἡγήσιν καὶ τάχ' οὐδὲ ἔθνη τὸ σύνολον. εἴτα τὸ
 ἔθος ἀγραφές τις εἶναι βούλεται νόμος καλὸν ἐπιγεγραμμένος νομοθέτην τὴν τῶν
 χρησμῶν ἀπάντων ἐπαιρησιν.

LATIN.—Examiner, Professor Nesbitt.

Translate, with brief notes when necessary:

1. Siciliam ac Sardiniam, quae ante bellum vectigales fuissent, vix
 praesides provinciarum exercitus alere: tributo sumptus suppeditari:
 tum ipsum tributum conferentium numerum tantis exercituum stragibus
 et ad Trasimennum lacum et ad Cannas imminutum; qui superessent
 pauci, et multiplici gravarentur stipendio, alia periturae peste. itaque nisi
 fide staret, rem publicam opibus non staturam, prodeundum in contio-
 nem Fulvio praetori esse, indicandas populo publicas necessitates, coh-
 rendosque, qui redempturi anxissent patrimonium, ut rei publicae, ex qua
 crevissent, tempus commodarent, conducereque ea lege praebenda, quae
 ad exercitum Hispaniensem opus essent, ut, quum pecunia in aulario
 esset, iam primis solveretur. Haec praeter in contione edixit, quoque die

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tions.

vestimenta frumentum Hispanici exercitui praebeunda quaeque alia opus essent inuvalibus sociis esset locutura. Ubi ea dies venit, ad eundem tres societates adierunt hominum undeviginti, quorum duo postulata fecerunt: unum, ut militum venissent, dum in eo publico essent; alterum, ut, quo in naves imponissent, ab hostium tempestatisque vi publico periculo essent. Utroque impetrato, conduxerunt, privataque pecunia respublica administrata est. Hi mores, eoque caritas potius per omnes ordines velut tenore uno pertinebat.

2. Quid multa? Totum hunc locum, quem ego vario modo orationibus, quarum tu Aristarchus es, soleo pingere, de flamma, de ferro—nosti illas λέξεις—, valde graviter pertexuit. Proximo Pompeium sedebam. Intellexi hominem moveri, utrum Crassum iure cum gratiam, quam ipse praetermisisset, an esse tantus res nostras, quae tam libenti senatu laudantur, ab eo praesertim, qui mihi laudem illam eo minus deberet, quod meis omnibus litteris in Pompeiana laude perstrictus esset. Hic dies me valde Crasso adiuuavit, et tamen ab illo aperte tecte quidquid est datum libenter accepi. Ego autem ipse, di boni! quo modo ἐντεταρπενόαμην novo auditori Pompeio! Si unquam mihi περίοδοι ἢ καμπαὶ ἐνθουσίαι ἢ κατασκευαὶ suppeditaerunt, illo tempore. Quid multa? Clamores. Etiam haec erat ἑρδία de gravitate ordinis, de equestri concordia, de consensione Italica, de inter-mortuis reliquis conurbationis, de vilitate, de oclis. Nosti iam in hac materia sonitus nostros: tanti fuerunt, ut ego eo brevior sim, quod eos nequo istim exauditos putem.

3. Translate and explain:

(a.) Hinc senatores, omissa dignitatis libertatisque memoria, plebem adulari salutare benigne invitare apparatus accipere opulis, res causas suscipere, eis temporis parti adesse, secundum eam licentia iudicis dare, quae magis popularis aptiorque in vulgus favori conciliando esset.

(b.) Laetique juveni promissis equum eximium dono dat, bigatosque quingentos quatuordecim numerare iubet.

(c.) Vixit omnes consenserunt, quam alia resolutis oris in aedibus voluuntur; alii, ne quid tenent, ancedunt incident. (Mention any other readings which have been suggested.)

(d.) Id mirabamur te ignorare, de tutela legitima, in qua dicitur esse pueri, nihil unum capi possumus.

(e.) Nam a Caecilio propinqui minore contemnis unum movere non possunt.

(f.) Meus autem liber totam Isocrati μυσθίον atque omnes ejus discipulorum arculas ac nonnulli etiam Aristotelis pigmenta consumpsit.

4. Translate into Latin prose:

These wars bring out another point of difference between Carthage and Rome. For, while the Romans waged their wars by the hands of their own citizens and allies, the wars of Carthage were mainly carried on by barbarian mercenaries, that is, soldiers serving for pay, whom they hired from Gaul, Spain, Africa, anywhere in short. A state which does this can never hold up for good against one which uses native armies; and it is a sign of the great wealth and power of Carthage, helped still more by a few very great men who appeared among her citizens, that Carthage could hold up as long as she did. Carthage had indeed one great advantage, namely that, as a trading city, she was very strong by sea, while the Romans had as yet hardly anything to do with naval affairs. Thus Carthage and Rome were

the two great states of the West, and it could hardly fail but that war should spring up between them about something. And it was the more likely, as the island of Sicily lay between them, where the Carthaginians had large possessions, and where the Greek cities were closely connected with the Greek subjects of Rome in Southern Italy.

*Appendix,
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Scholarship
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Translate, with brief notes :

1. Pars magna Italiae est, si verum admittimus, in qua
Nemo togam sumit nisi mortuus. Ipsa dierum
Festorum herboso colitur si quando theatro
Maiestas tandemque redit ad pulpita notum
Exodium, quum personas pallentis hiatum
In gremio matris formidat rusticus infans,
Aequales habitus illic similesque videbis
Orchestra et populum : clari velamen honoris,
Sufficiunt tunicæ summis Aedilibus albae.
Hic ultra vires habitus nitor ; hic aliquid plus
Quam satis est interdum aliena sumitur arca.
Commune id vitium est : hic vivimus ambitiosa
Paupertate omnes. Quid te moror ? omnia Romae
Cum pretio. Quid das ut Cosum aliquando salutes ?
Ut te respiciat clauso Veiento labello ?
Ille metit barbam, crinem hic deponit amati ;
Plena domus libia venalibus. Accipe et istud
Fermentum tibi habe : praestare tributa clientes
Cogimur et cultis augere peculia servis.
2. Consumptis opibus vocem, Damaspæ, locasti
Sipario, clamosum ageres ut Phasma Catulli ;
Laureolum velox etiam bene Lentulus egit,
Iudice me dignus vera cruce. Nec tamen ipsi
Ignoscas populo : populi frons durior huius,
Qui sedet et spectat triscurria patriciorum
Planipedes audit Fabios, ridere potest qui
Mamercorum alas. Quanti sua funera vendant
Quid refert ? vendant nullo cogente Nerone,
Nec dubitant celsi praetoris vendere ludia.
Finge tamen gladios inde, atque hinc pulpita pone :
Quid satius ? mortem sic quisquam exhorruit ut sit
Zelotypus Thymæas, stupidi collega Corinthi ?
3. Occurris quotiens, Laperce, nobis :
" Vis mittam puerum " subinde dicis,
" Cui tradas epigrammaton libellum,
Lectum quem tibi protinus remittam ? "
Non est quod puerum, Laperce, vexes.
Longum est si velit ad Pirum venire,
Et scalis habito tribus, sed altis.
Quod quaeris propius petas licebit.
Argi nempe soles subire letum :
Contra Caesaris est forum taberna
Scriptis postibus hinc et inde totis.
Omnes ut cito perlegas poetas.
Illinc me pete, nec roges Atreiciam, —
Hoc nomen dominus gerit tabernae, —

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De primo dabit alterove nido
Rasum pumice purpuraque cultum
Denaris tibi quinque Martialis.
"Tanti non es" ais? Sapis, Luporeo.

4. Frater ad oloquium viridi tendebat ab ovo,
Fortia verbesi natus ad arma fori.
At mihi iam puero caelestia sacra placebant,
Inque suum furtim Musa trahebat opus.
Saepe pater dixit: "Stadium quid inutile tentas?
Maeonides nullas ipse reliquit opes."
Motus enim dictis, totoque Helicone relicto,
Scribere conabar verba soluta modis.
Sponte sua carmen numeros veniebat ad aptos,
Et, quod tentabam scribere, versus erat.
Interea tacito passim labentibus aunis,
Liberior fratri sumta mihiq; toga est,
Induiturque humeris cum lato purpura clavo;
Et studium nobis, quod fuit ante, manot.
Iamque decem vitae frater geminaverat annos,
Cum perit, et coepi parte curare mei.
Cepimus et tenerae primos aetatis honores,
Deque viris quondam pars tribus una fui.
Curia restabat: clavi mensura coacta est:
Maius erat nostris viribus illud onus.

5. Translate and explain:

- (a.) Et qui nec cynicos nec stoica dogmata legit
A cynicis tunica distantia, non Epicurum
Suspexit oxigui laetum plantaribus horti.
- (b.) Stupet haec, qui jam post terga, reliquit
Sexaginta annos, Fonteio consulo natus?
- (c.) Quanta autem inde feres tam dirae praemia culpa
Cum tentas naper Marius discinxerit Afros.
- (d.) Quanquam et Cappadoces faciant equitesque Bithyni,
Altern quos nudo traducit Gallia talo.
- (e.) Cedro nunc licet ambulos perunctus
Et frontis gemino decens honore
Pictis luxuriis umbilicis,
Et te purpura delicata velet
Et cocco rubeat superbus index.
- (f.) Tu Libyos Indis suspendis dentibus orbes.
- (g.) Censetur Apona Livio suo tellus.

6. Translate into Latin elegiacs:

A spring there is whose silver waters show,
Clear as a glass the shining sands below;
A flowery Lotus spreads its arms above,
Shades all the banks and seems itself a grove;
Eternal greens the mossy margin grace
Watched by the sylvan genius of the place.
Here as I lay and swelled with tears the flood
Before my eyes a watery virgin stood,

She stood and cried, "Oh you that love in vain
Fly hence and seek the fair Leucadian main ;
There stands a rock from whose impending steep
Apollo's fane surveys the rolling deep ;
There injured lovers leaping from above
Their flames extinguish and forget their love."

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tions.*

THE ENGLISH LANGUAGE.—*Examiner, Professor Fonge.*

1. What transitions did the English language go through between the reigns of Edward III. and Elizabeth, and how far do they, or should they, influence our study of the early English writers.
2. Give an analysis of the first Book of the Essay on Man, quoting one passage of at least ten lines.
3. How far may "Macbeth" be regarded as an historical play. Is there any passage in it which seems to determine the time at which it was written.
4. Mention some of the instances which Lord Macaulay cites in his first chapter, of the degree in which modern, or comparatively modern statesmen have considered themselves bound to guide their conduct by precedents drawn from the age of the Plantagenets.
5. Enumerate the chief classes into which the literature of a nation may naturally be divided ; and mention the names of one or two of the most eminent writers in each class in our own nation, with the reigns in which they lived.
6. What are the origin and meaning of the term Aryan ; and to what language is it now applied.
7. Write a brief essay on Pope's life and character ; embodying any of Dr. Johnson's comments on his genius and works, if you are acquainted with them.

MODERN LANGUAGES.—*Examiner, Professor Meissner.*

FRENCH.

Translate into French :

1. Hardly had he pronounced these words, when his voice failed him. The cock crows before day-break. He stands before the door. The gentleman who has just gone out is the one of whom I spoke to you. He did nothing but play. This ought to have satisfied you. I wished you would go with me.
2. Charles V. was born at Ghent on the twenty-fourth day of February, in the year one thousand five hundred. A long train of fortunate events had opened the way for this young prince to the inheritance of more extensive dominions than any European monarch, since Charlemagne, had possessed. Each of his ancestors had acquired kingdoms or provinces, towards which their prospects of succession was extremely remote.
3. Our good or bad fortune in the world depends on our own prudence. There is a book open for all eyes, it is that of nature. How comes it to pass that men are usually more judicious in other people's affairs than in their own ?

Translate into English :

Les tirailleurs arrivaient alors près du ravin bordé de broussailles & de haies vives. Déjà, quelques instants avant, j'avais aperçu plus loin, de

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tions.

l'autre côté, quelque chose remuer & reluire comme des épis où passe le vent; l'idée m'était venue que les Russes, avec leurs lances & leurs sabres, pouvaient bien être là; j'avais pourtant de la peine à le croire. Mais au moment où nos tirailleurs s'approchaient des bruyères, & comme la fusillade s'engageait en plusieurs endroits, je vis clairement que c'étaient des lances. Presque aussitôt un éclair brilla juste en face de nous & le canon tonna. Ces Russes avaient des canons; ils venaient de tirer sur nous, & je ne sais quel bruit m'ayant fait tourner la tête, je vis que dans les rangs, à gauche, se trouvait un vide.

En même temps j'entendis le colonel Zapfel qui disait tranquillement:

"Serrez les rangs!"

Et le capitaine Florentin qui répétait:

"Serrez les rangs!"

Cela s'était fait si vite, que je n'eus pas le temps de réfléchir. Mais cinquante pas plus loin il y eut encore un éclair & un bruit pareil dans les rangs,—comme un grand souffle qui passe,—& je vis encore un trou, cette fois à droite.—ERCKMANN-CHATRIAN.

Philological Questions:

1. Explain the terms *langue d'oc* and *langue d'oïl*.
2. Give the etyma of *ois*, *cheval* and *hâton*, and remark thereon.
3. Account for the difference in gender in: *le somme* and *la somme*, *le livre* and *la livre*.

Translate into German:—

I had expected that he would not be at home. When spring begins, the swallows return. When I called upon my friend, I found him ill. Read down to the end of the chapter. The book lies upon the table. I have put the book upon the table. He attends to his business most conscientiously. He has met with many a misfortune. The whole family is in the country. The steam-boat arrives at a quarter to three. What did he speak of? In what have I done wrong? These are important documents. They sat beside each other. Even the richest is not without cares. You may rely upon it. As soon as we received the news, we ordered our horses to be saddled. He has been obliged to resign his office. He has not been able to come. I shall not be able to stay. The children are to go to school.

Translate into English:

Anfangs hielten sich die beiden großen Parteien ungefähr das Gleichgewicht, ja die Franzosen entwickelten ein gewisse Ueberlegenheit. Wohl bezwangen am Niederrhein die Verbündeten das Christliche Köln, dagegen scheiterte Marlborough's Angriff auf Belgien an dem kühnsten und festen Widerstande des Marschall Boufflers. Am Oberrhein eroberte Ludwig von Baden den Franzosen Landau ab und bereitete einen Stoß auf Lothringen vor, als sich plötzlich in seinem Rücken Max Emanuel erhob, ihm einnahm und damit den Landgrafen nöthigte, über den Rhein zurückzugehen und in einer festen Stellung auf dem Schwarzwalde so möglich die Vereinigung der Bayern und der Franzosen zu hindern. In Italien eröfnete Eugen den Feldzug durch einen ungeheuerlichen Handstreich gegen die Festung Cremona, indem er durch einen alten, leer und unbesetzt gelassenen Abzugsgraben mit 2000 Mann in dieselbe einbrach, den feindlichen Heerführer Willeröth auf dessen eigener Hauptwache gefangen nahm, dann aber den Platz gegen die Uebermacht doch nicht behaupten konnte.—SYBEL.

SCIENCE SCHOLARSHIPS.—FIRST YEAR STUDENTS.

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tions.

ALGEBRA AND ARITHMETIC.

1. A manufacturer finds that if in the coming year he has to pay 20 per cent. more for his raw material and 8 per cent. more for the cost of manufacture he will require to raise the price of his manufactured goods 14 per cent. in order to make the same profit as before, but that if he has to pay 25 per cent. more for his material and 12 per cent. more for the cost of manufacture he must raise the price of his goods $17\frac{1}{2}$ per cent.; find what proportion the cost of material and the cost of manufacture originally bore to one another.

2. The sides of a triangle are 5, 6, 7, respectively. Calculate to two decimal places its area and the radius of the escribed circle touching the longest side.

3. What sum of money will amount in two years to £100 at 6 per cent. compound interest.

4. Given $\cos 40^\circ = .766$; find to two decimal places $\tan 20^\circ$ and $\tan 25^\circ$.

5. Solve the equations—

$$(\alpha) 3x^2 + 4x = 7.$$

$$(\beta) x^2 + \frac{1}{x^2} = x + \frac{1}{x}.$$

$$(\gamma) \sqrt{1+4x^2} + \sqrt{x^2+4} = \sqrt{1+x+x^2}.$$

6. Reduce to a quadratic the equation

$$\left(\frac{m-x}{n+x}\right)^{\frac{1}{2}} - \left(\frac{n+x}{m-x}\right)^{\frac{1}{2}} = a.$$

7. Given

$$\left. \begin{aligned} x^2y &= (a-x)^2 \\ y^2x &= (b-y)^2 \end{aligned} \right\} \text{find } x \text{ and } y.$$

8. Given

$$\left. \begin{aligned} y+z &= x(a+yz) \\ z+x &= y(b+zx) \\ x+y &= z(c+xy) \end{aligned} \right\} \text{find } x, y, \text{ and } z.$$

9. Find the sum of a geometric series. Prove that if S be the sum of a series in geometric progression S' the sum of the same series with its terms alternately positive and negative Σ the sum of the first series with its terms all squared then $\Sigma = SS'$ provided that the number of terms in the series be an odd number.

10. Define a logarithm to the base 10. Why have logarithms of the same sequence of figures the same mantissa wherever the decimal point be placed.

$$\text{Given } \log 2 = 0.30103 \quad \log 3 = 0.47712.$$

$$\text{Calculate } \log(.0054).$$

Assuming that the logarithms of two consecutive numbers greater than 1000 differ only in the fourth place of decimals. Calculate $\log 7$ to three places.

11. Find the coefficient of x^2 in $(3-2x)^{10}$ and of x^3 in $(1+x)(1+x^2)^4(1+x^3)^2$.

12. Prove that the solution of the problem—to find a point P in a given line such that the sum of its distances from two given points off the line but both on the same side of it depends upon a quadratic equation. Find by this method the position of P when such sum is least.

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tions.

GEOMETRY AND TRIGONOMETRY.

1. Define similar figures. A rectilinear figure described upon the hypotenuse of a right-angled triangle is equal to the sum of two similar and similarly placed figures described upon the sides.

2. The area of a polygon of given sides is greatest when it is inscribable in a circle.

3. Find two lines such that the rectangle under them shall be equal to one given area and the difference of their squares to another.

4. Given two circles, the second passing through the centre A of the first, show that if a variable tangent to the first meet the second in the points P, Q the rectangle $AP.AQ$ is constant.

5. Find $\tan 15^\circ$ and $\tan 7^\circ\frac{1}{2}$.

Reduce each to a decimal to three places.

6. Prove that

$$\tan \frac{1}{2}(A - B) = \cot \frac{1}{2}C \frac{a - b}{a + b}, \text{ and that } \tan \frac{1}{2}A = \sqrt{\frac{s - b \cdot s - c}{s \cdot s - a}}.$$

7. A hexagon five of whose sides are equal is inscribed in a circle of radius (r). Given the length a of one of the equal sides calculate that of the remaining side.

8. Reduce $1 - \cos^2 A - \cos^2 B - \cos^2 C - 2\cos A \cos B \cos C$ to the product of four factors. Hence find a corresponding expression for $1 - \cos^2 A - \cos^2 B - \cos^2 C + 2\cos A \cos B \cos C$.

9. Prove that in all cases $a = b \cos C + c \cos B$. From this and the two similar formulae deduce the expression for $\cos A$ in terms of the sides.

10. Prove from trigonometrical considerations that $\frac{1 + x}{\sqrt{1 + x^2}}$ is greatest when $x = 1$.

11. Given $\cos 29^\circ = .87462$ $\cos 31^\circ = .85717$, find to 5 decimal places $\tan 1^\circ$.

12. Show that

$$\text{if } 2\psi = \phi + \sin^{-1}(e \sin \phi), \phi = \psi + \tan^{-1}(e \tan \psi), \text{ where } e = \frac{1 - c}{1 + c}.$$

SECOND YEAR STUDENTS.

MATHEMATICS.—*Examiner, Professor Purser.*

1. Find the volume of a pyramid.

Find the whole area of the sphere.

2. Prove that if V be the volume of the solid cut off by plane from a given cone, and A the area of the triangle subtended by the major axis of the section at the vertex of the cone then $V \propto A^{\frac{3}{2}}$.

3. Deduce by any method the value of π to three decimal places.

4. Show how to reduce the elimination of one variable from two equations of the n^{th} degree to that of n variables from n equations of the first degree.

Write down as a determinant the result of eliminating x from $x^4 + ax^3 + d = 0$ $x^4 + ex$ $e = 0$.

5. Show that $\log(1+x)$ lies between $x - \frac{1}{2}x^2$ and $x - \frac{1}{3}x^2$, x being less than unity.

- Assuming this, prove that the continued product $(1+\alpha)(1+\beta)(1+\gamma)\dots\dots\dots$ converges to a finite value distinct from zero when the series $\alpha+\beta+\gamma+\dots$, and $\alpha^2+\beta^2+\gamma^2+\dots$ are both convergent.
6. Prove that if $x \cos(a_1+a_2)+y \sin(+a_1+a_2)=\cos(a_1-a_2)$ be denoted by A_{12} , then $A_{12} A_{23} A_{34} \dots A_{n-1} A_n$ is divisible by x^2+y^2-1 .
7. Prove De Moivre's theorem.
Expand $\cos n\theta$ in cosines of multiples of θ and $\cos n\theta$ in powers of $\cos \theta$.
8. Assuming the exponential and logarithmic series, calculate $\sqrt{e}$ and $\log_e(10)$ each to two decimal places.

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tions.

CO-ORDINATE GEOMETRY.

- The co-ordinates of the vertices of a triangle are of $A(3,0)$, of $B(0,1)$, of $C(4,3)$, find the co-ordinates.
 1° of the intersection of AB and OC ,
 2° of the foot of the perpendicular from A on BC ,
 3° of the centre of the circle inscribed in ABC .
- Find the length of the perpendicular from any point $x'y'$.
 1° on the line $x \cos \alpha + y \sin \alpha = p$
 2° on each of the bisectors between the lines
 $x \cos \alpha + y \sin \alpha = p$ and $x \cos \beta + y \sin \beta = p'$
- Find the equation of the tangent to the circle
 $ax^2+ay^2+2gx+2fy+c=0$ at any point $x'y'$.
 Prove that the same equation represents the polar when the point is not on the curve.
- A varying circle passes through the vertex of a given right-angled triangle, and touches the hypotenuse: if m and n are the intercepts cut off from the sides a and b of the triangle; find the relation between m and n .

CONIC SECTIONS.

[To be proved geometrically.]

- Find the area of a parabola cut off by any chord.
- The tangent to a central conic makes equal angles with the focal distances.
- There exist in general two points in the plane of any section of a cone such that the sum or difference of the distances from these points of a variable point on the curve of section is constant. Prove this, and point out the exceptional case.
- If P be a point on an ellipse, Q the corresponding point on the auxiliary circle, S one of the foci, then SP is equal to the perpendicular let fall from S on the tangent to the circle at Q .

SPHERICAL TRIGONOMETRY.

- Any four of the six elements of a spherical triangle can be connected by a formula.
 Show that there are four distinct types of these formulae. Write down and prove a formula of each type.
- Prove that in a right-angled triangle
 $\sin \alpha = \sin A \sin c$ and $\cos c = \cot A \cot B$.

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tions.

3. If $ABCD$ is a spherical quadrilateral and AB , DC when produced meet in Q prove that

$$\cos AD \cos BC - \cos BD \cos AC = \sin AB \sin CD \cos Q.$$

4. Given in position the vertical angle of a spherical triangle and a point through which the base passes, prove that its area is a maximum or a minimum when the base is bisected at the point. Distinguish when it is a maximum, and when a minimum.

DIFFERENTIAL CALCULUS.

1. Prove that $\frac{d}{dx}(x^n) = nx^{n-1}$ for all indices.

2. Differentiate the following expressions:—

$$\frac{x^3}{(1+x^2)^2}, \quad \frac{(2x^2-1)\sqrt{1+x^2}}{3x^2}, \quad \tan^{-1} \frac{2x}{1-x^2}, \quad \log \tan x.$$

3. If x and y are the co-ordinates of a variable point on a given curve,

$$\text{examine the geometric meanings of } \frac{dy}{dx} \quad \frac{y - x \frac{dy}{dx}}{\sqrt{1 + \left(\frac{dy}{dx}\right)^2}}.$$

4. Examine by the Differential Calculus when $x^a(a-x)$ is a maximum or minimum.

Find when the portion of the tangent to a parabola intercepted between the point of contact and the directrix subtends at the focus a triangle of minimum area.

ENGINEERING SCHOLARSHIPS.—SECOND YEAR STUDENTS.

NATURAL PHILOSOPHY.—*Examiner, Professor Everett.*

EXPERIMENTAL PHYSICS.

1. Give a brief account (without going into calculation) of the corrections of the barometer for temperature and capillarity, and of the reduction to sea-level. In what barometers is the correction for capacity necessary?

2. What is the general principle of the wet and dry bulb hygrometer, and what is meant by the "relative humidity" of the air?

3. Point out the difference between the behaviour of an ordinary gas, and the behaviour of a vapour at maximum tension, in contact with its liquid, (a) when a slight additional pressure is applied, the heat of compression being allowed to escape, (b) when the temperature is raised by the direct application of heat.

4. Define electrical density at a point on the surface of a conductor, and describe a mode of measuring it.

5. What relations exist between the horizontal, vertical, and total magnetic intensities at a place on the earth's surface; and how can the dip be calculated when the two former are known?

6. When a plane circuit is suspended from an Ampère's stand, and a current passed through it, what position does it ultimately assume when acted on solely by terrestrial magnetism? What is meant by a solenoid, and what position does it assume in the above circumstances?

7. A plane mirror upon which a ray of light falls, is turned, through a given angle, about an axis perpendicular to the plane of incidence. Investigate the change which is produced in the direction of the reflected ray.

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tions.

8. Explain the use of the sounding board in the piano; and describe the construction of a reed organ-pipe.

9. If the velocity of sound in air is 15000 feet per second, what will be the length of a fir rod, which, when vibrating longitudinally in its fundamental mode, produces a note of 512 vibrations per second?

NATURAL HISTORY.—*Examiner, Dr. Cunningham.*

MINERALOGY, GEOLOGY, AND PHYSICAL GEOGRAPHY.

1. State the chemical and physical characters of the following minerals: Celestine, Barytes, Corundum, Garnet, and Zircon.

2. What is the nature of Lydian-stone, and where has it been obtained in Ireland?

3. What beds are designated by the name of "Calp," and in what part of Ireland do they principally occur.

4. Give a table of the Jurassic strata as exhibited in Great Britain and Ireland.

5. Describe the structure of a Belemnite.

6. Mention some of the principal fossils of the London clay.

7. Give the names of the chief salt lakes of the Old and New World.

8. Describe the phenomenon known as a Bore or Aegre, and mention some of the localities where it has been specially observed.

THIRD YEAR STUDENTS.

NATURAL PHILOSOPHY.—*Examiner, Professor Everett.*

1. State precisely what is meant when it is asserted that "the perpetual motion" is impossible.

2. Investigate the equation to the path of a projectile in vacuo.

3. Prove the formula $T = 2\pi \sqrt{\frac{l}{g}}$ for a simple pendulum.

4. If the height of a rough inclined plane be to the length as 3 to 5, and a weight of 10 lbs. can just be supported by friction alone, find the force which, acting along the plane, would be just sufficient to draw the weight up.

5. Two weights of 2 lbs. and 5 lbs. balance on a uniform heavy lever, the arms being in the ratio of 2 to 1: find the weight of the lever.

6. Investigate the position of the geometrical focus after refraction, when a pencil of rays is incident in air, upon a plane surface of glass whose index of refraction is μ .

7. If the surface of the glass in the preceding question were concave with radius of curvature r , investigate the relation which would exist between conjugate focal distances.

8. Compare the internal and external diameters of a hollow sphere of copper which will barely float in water, the specific gravity of copper being 9.

Answer also questions 3, 4, 5, 6, 9, of the second year paper.

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tions.

MEDICAL SCHOLARSHIPS.—SECOND YEAR STUDENTS.

ANATOMY AND PHYSIOLOGY.—*Examiner, Dr. Redfern.*

1. Name the specimens numbered 1 to 10 and describe the special characteristics of each on which your opinion is founded.
2. Describe the ligaments and all the movements of which the temporo-maxillary articulation is capable, and state their uses.
3. Describe carefully the whole actions of the trapezius, the pectoralis major, and the pectoralis minor muscles respectively, and the uses of each.
4. State the nature and objects of the act of primary digestion, and the way in which the different parts of this act are allotted to different parts of the alimentary canal.
5. Give a short account of the structure of each of the valves connected with the heart, together with the mode of action and uses of each.

NATURAL HISTORY.—*Examiner, Dr. Cunningham.*

ZOOLOGY.

1. Give an account of the general structure of Echinoidea.
2. Describe the exo-skeleton in an insect.
3. Give a brief account of the various modifications of the respiratory system in the sub-kingdom Mollusca.
4. What are the distinguishing characters of the Pteropoda?
5. Describe the structure of the gill flap in an osseous fish.
6. In what classes of Vertebrata does the quadrate bone occur, and what are its homologues?
7. Give a brief account of the different forms of placenta.
8. Give the names of the orders of Mammalia of which indigenous representatives are met with in the British islands.

BOTANY.

1. What is the nature of the fruit in the following plants:—Vine, Potato, Gooseberry, Raspberry, Mulberry, Strawberry, Foxglove.
2. Describe the structure of a ripe seed.
3. Briefly describe the nature of the germination in Dicotyledons, Monocotyledons, and Acotyledons.
4. State some of the principal objections to the employment of the Linnean system of classification.
5. By what characters may the following allied orders be distinguished from each other:—Compositae, Dipsacaceae, Calyceraceae, and Valerianaceae.
6. Minutely describe the flower of an Orchid, and mention in what manner fertilisation is usually effected.
7. Mention the orders to which the following genera belong:—Veronica, Alchemilla, Aesculus, Carpinus, Castanea, Tulipa, Galanthus, Crocus.

CHEMISTRY.—*Examiner, Dr. Andrews.*

1. How would you determine the amount of heat disengaged in the combination of bodies with oxygen?
2. What would be the increase of a given volume of air in being heated from 0°C to 2500°C?
3. Give an account of the methods, analytical and synthetical, by which the composition of water has been exactly determined?
4. How is hypochlorous acid prepared, and what are its properties?

5. Describe the preparation and properties of the bisulphide of carbon, and state the relation in composition between the sulpho-carbonates and carbonates. Appendix No. 8.

6. State in symbols the reaction which takes place when fluoride of silicon comes into contact with water. Scholarship Examinations.

7. Explain what is meant by the equivalency of an element, and write the constitutional or graphic formulae of the following compounds:— H_2O , CO_2 , SO_2 , N_2O_5 , and NH_4Cl .

What are the sources, chief properties, and uses of the nitrates of potassium and sodium?

9. Give an account of aluminium and of its compounds with oxygen and chlorine.

10. Describe the chief ores of copper and the chemical tests for that metal.

11. What are the sources of thallium and its distinctive properties?

12. Describe the mode of performing the ultimate analysis of such a body as urea.

13. State the composition of the series of hydrocarbons called olefines, and describe the general methods by which they can be prepared.

14. Write the formula of methyl alcohol on the type of marsh gas, and show how the other monatomic alcohols of the same series may be derived from it by replacement of one or more hydrogen atoms.

15. How is hydrocyanic acid prepared, and what are its tests?

16. What are the distinguishing properties of blood and bile?

THIRD YEAR STUDENTS.

ANATOMY AND PHYSIOLOGY.—*Examiner, Dr. Redfern.*

1. Name the specimens numbered 1 to 10, and describe carefully the distinctive characters of each.

2. Describe the mechanism by which the foot can be applied to the irregularities of the surface of the ground. Mention the parts which are compressed and those which are made tense when the weight of the body is borne by the foot.

3. Describe the movements of the tongue and hyoid bone in deglutition, and mention the muscles which produces each movement you describe.

4. What changes take place in the composition of muscle and blood when muscle contracts. Give full evidence in proof of each statement you make.

5. State the order and periods of eruption of the temporary and of the permanent teeth, and describe the process of eruption and the way in which it is produced.

6. State the uses of nerves and nervous ganglia.

PRACTICAL CHEMISTRY.—*Examiner, Dr. Andrews.*

1. 100 grammes of a solution of hydrocyanic acid gave 12 grammes of cyanide of silver on the addition of a soluble salt of silver; what was the composition of the solution?

2. How many grammes of (yellow) phosphate of silver will be obtained by precipitation from 50 grammes of crystallized phosphate of sodium ($Na_2HPO_4 \cdot 12H_2O$)?

Appendix,
No. 2,
Scholarship
Examina-
tions.

3. What are the blow-pipe tests for alumina, magnesia, and oxide of zinc?
4. How would you determine the strength of a solution of arsenic acid?
5. What are the tests for silver, gold, and platinum?
6. How would you distinguish salicine from quinine?
7. How would you analyze an alloy of copper, tin, and zinc?
8. How would you discover the presence of ordinary alcohol if mixed with methylic alcohol?
9. What are the characteristic properties of nicotine?
10. What are the distinctive properties of arseniuretted and antimonuretted hydrogen?

[The Candidates were also examined in qualitative analysis.]

FOURTH YEAR STUDENTS.

ANATOMY AND PHYSIOLOGY.—*Examiner, Dr. Redfern.*

ANATOMY.

1. Name the specimens numbered 1 to 10, and describe carefully the distinctive characters of each.
2. Describe the origin and course of the following arteries and branches of arteries:—Thyroid arteries; anterior cerebral; anterior spinal; superior intercostal; anterior thoracic; posterior interosseous of forearm; princeps pellicis.
3. Give a careful and complete account of the capsule of the hip-joint.
4. Write a list of the branches of the great sciatic nerve and of the parts supplied by them, in the order in which the branches successively arise.
5. The parts superficial to the masseter muscle having been dissected, state how you would proceed with the dissection of the zygomatic region, and mention the parts you would meet with in their proper order.

PHYSIOLOGY.

1. Describe the whole structure of a bone corpuscle as it occurs in the living body, and its function.
2. What is known of the action of gland cells and the changes taking place in them in connection with secretion.
3. What evidence have we that the structure of parts of the body is changed during the performance of the function of nutrition? Give illustrations of the effects of increase in the quantity of blood supplied to particular parts.
4. State the evidence by which Harvey believed he had proved that the blood moves in a circle.
5. State the characters of the sensibility of the anterior roots of the spinal nerves, as demonstrated by Majendie and Longel.

SURGERY.—*Examiner, Dr. Gordon.*

1. Describe the position of the head of the humerus in the sub-coracoid dislocations, the condition of the scapular muscles and the mode of reduction which is attended with least muscular tension or resistance.
2. Describe the bursae around the knee-joint, their various morbid conditions, and the treatment.
3. Describe the operation of ligaturing the superficial femoral artery

in the middle of the thigh, mentioning the parts successively exposed as you proceed in the operation. *Appendix, No. 6.*
 4. Describe the course and source of abscesses met with in the groin, and their differential diagnosis. *Scholarship Examinations.*

MATERIA MEDICA.—Examiner, Dr. J. Seaton Reid.

1. Name our chief sedative medicines.
2. Write prescriptions for the internal use of each in a fluid form for an adult.
3. Name our anti-periodic medicines.
4. Write prescriptions for the internal use of each by an adult.
5. What ingredients enter into the compositions of the *Mistura Sennae Composita*?
6. Write a prescription for its use by an adult.
7. What are the medicinal properties of *Extractum Physostigmatis*, and its dose?
8. Write a prescription for its use by an adult in a fluid form.
9. How much opium is in a scruple of *Pulvis Kino Compositus*, and in *Pulvis Cretae Aromaticus* a. Opio?
10. How many grains are in a "gramme."
11. Name the medicines on the table, and classify them therapeutically.

MEDICINE.—Examiner, Dr. Cuning.

1. In what diseases is an abnormally slow pulse met with?
2. Describe the ascending and descending respiration, and mention the circumstances under which it is found.
3. Give the symptoms and treatment of laryngismus stridulus.
4. Give the pathology of haematoma of the dura mater.
5. Give the pathology and treatment of fatty liver.
6. State the general course of the eruption in variola, scarlet fever, typhus, and varicella.
7. Give the physical signs of cirrhosis of the lung.

MIDWIFERY AND DISEASES OF WOMEN AND CHILDREN.—Examiner, Dr. R. F. Dill.

1. State the names of our oxytocic medicines.
2. State the means we have at our disposal for exciting uterine action.
3. State the circumstances under which it may be considered necessary to puncture the membranes.
4. What are the phenomena of the different stages of labour?
5. What is understood by the terms "maternal dystocia" and "fetal dystocia"?
6. State the probable results arising from premature rupturing of the membranes, and escape of the liquor amnii.
7. State briefly a case of placenta previa, its symptoms and management. State also wherein accidental haemorrhage differs from unavoidable haemorrhage.
8. What are the displacements of the gravid uterus? How do they impede labour? How are they to be corrected?

Appends,
No. 8.
Scholarship
Examina-
tions.

9. Give a short account of our present knowledge of the anatomy of the placenta; more particularly the maternal, and the fetal circulation.
10. What are the signs of life and death of the fœtus in utero?
11. What are the symptoms and signs of syphilis in an infant? When and where do they appear first? Describe the treatment.

MEDICAL JURISPRUDENCE.—*Examiner, Professor Hodges, M.D., F.R.S.*

1. State the symptoms produced by a poisonous dose of phosphorus.
2. What are the *post mortem* appearances found in cases of poisoning by Phosphorus?
3. Mention the poisonous dose of extract of Belladonna, the symptoms produced by it, and the methods required for its identification.
4. State the classes to which the following poisons belong:—Phosphorus, Oxalic acid, Strychnine, Aconite.
5. Mention the average period and doses in which the following poisons have been found to cause death:—Opium, Cyanide of Potassium, Cantharides, Strychnine.
6. What is the earliest period of Uterine life at which a child may be born living and viable?
7. What is meant by the state of the lungs called "Atelectasis?"
8. Describe the appearances which are presented in the dead body of a woman, when death has taken place after delivery at the full period.

LAW SCHOLARSHIPS.—FIRST YEAR STUDENTS.

REAL PROPERTY AND CONVEYANCING.—*Examiner, Professor Molyneux.*

1. State the elements essential to constitute a surrender by operation of law.
2. Three denominations of land were in 1830 granted; the first, "unto and to the use of A and his heirs, to the use of B (then a married man) and his heirs."
The second, "to A and his heirs, to the use of B and C and their heirs."
The third, "to the use of A for life, remainder to the use of B and his heirs."
B afterwards died intestate, leaving his wife surviving; did any right survive to her? State the ground of the answer in each case.
3. What construction does the law put upon a limitation in a deed to a person and his heirs male?
4. A, being possessed of a term years in land, assigns it to B and the heirs of his body: what interest does B take?
5. Describe the estates, in character and quantity, taken by the following limitations:
"To A (a widow) during her life, provided she continue a widow and unmarried; and after her marriage to B and his heirs, during her life; and after her decease to her heirs."
"To C and D, brothers, and the heirs of their bodies."
"To E and F (husband and wife) and G, and their heirs."

6. Lease for 50 years if O D shall so long live.
Lease to O D for his life or 50 years, whichever shall last longest.
What are the qualities and tenures of those demises?
7. What qualification may be attached to an estate tail, at common law, which would be void if attempted in the limitation of an estate in fee simple?
8. Where an estate in land is conveyed to a person against his will, and another descends upon him by inheritance, which does he not wish to accept, by what several legal instruments can he discharge himself of those estates?
9. Into what two classes are estates upon condition divided? And in what particular do the rights and power of persons taking such estates differ?
10. How and at what period did estates tail originate: and what object was sought to be attained by the Statute? And what was the state of the law prior to the enactment?
11. In what respect did the abolition of Real Actions affect assurances of land?
12. In the case of intestacy what different modes of devolution of title are incident to Freehold and Chattels Real respectively?

JURISPRUDENCE.—*Examiner, Professor Leslie.*

1. Explain the following propositions:—(1) "A sovereign government has no legal rights against its subjects": (2) "Limited monarchy is not monarchy": (3) "Every supreme government is a monarchy or an aristocracy."
2. (1) Explain, according to Austin, the distinction between civil injuries and crimes. (2) Criticize the distinction drawn by Blackstone.
3. Explain historically the growth of Roman Equity.
4. What are the two features which, according to Sir H. Maine, Roman and English Equity have in common?
5. "The law of the middle ages relating to women carries the stamp of its double origin." Explain this.
6. What is the peculiar difficulty of accounting for the origin of primogeniture? How does Sir H. Maine solve the problem?
7. Explain clearly the cause of the different proportions of criminal and civil law in archaic and mature jurisprudence, respectively.
8. What are the marks of sovereignty, according to Austin?
9. Define the terms, Positive Law; General Jurisprudence; Civil Liberty.
10. Is International law positive law, or not, and why?

SECOND YEAR STUDENTS.

EQUITY.—*Examiner, Professor Molynaux.*

1. Taking into account the principles of Law and Equity as distinguished from the administration of those systems, in what sense alone can the fusion of Law and Equity be entertained?
2. In what respect does moral or natural Equity differ from that administered in our Courts of Equity so far as the jurisdiction and authority of the Court is concerned?

Appendix,
No. 1.
Scholarship
Examina-
tions.

3. How does the sense of the expression "*equity of the statute*" differ from the *distinctive system* as administered in our *Courts of Equity*?

4. State the respective nature of and distinction between the "*exclusive*," "*concurrent*," and "*auxiliary*" heads of jurisdiction of the Court of Chancery: and give some instances under each head.

5. In what instances will Courts of Equity exercise jurisdiction even although the plaintiff is *in pari delicto*.

6. Within what limits does the Court of Chancery apply the maxim "*equitas sequitur legem*" when called upon to put a construction on written instruments?

7. What principle is common to Courts of Equity and Law in the construction of wills?

8. State some cases in which a party not having *actual notice* will be held bound by *constructive notice*.

9. What are the limitations within which Courts of Equity grant relief under the head of mistake?

10. Where a written contract has been based in fraud of one of the contractors, how is the jurisdiction of the Court exercised where that party is plaintiff or defendant respectively?

11. In what respect are the Statutes against voluntary conveyances more stringent in their operation than the principle of equity under the head of fraud as previously administered by the Court of Chancery; and how are they less extensive in their application as to persons interested?

12. How far are contracts in restraint of trade held void?

JURISPRUDENCE AND CIVIL LAW.—*Examiner, Professor Leslie.*

1. "The chief object of the following pages is to indicate some of the earliest ideas of mankind, as they are reflected in Ancient Law, and to point out the relation of those ideas to modern thought." (*Ancient Law. Preface.*) Adduce examples of the relationship between archaic and modern ideas here referred to.

2. "The early forms of juristic conceptions contain, potentially, all the forms in which law has subsequently exhibited itself." Adduce examples of the process of evolution here referred to.

3. Trace some of the leading changes in Roman law from the Twelve Tables to the Codifications of Justinian, inclusive.

4. Explain historically the origin of Roman Equity.

5. Legal conceptions and phraseology undergo, according to Sir Henry Maine, "a process of gradual specialisation." Give examples from Roman Law.

6. Give a historical account of the law of *usucapio*, and explain the cause of its great importance in Roman law, prior to Justinian's reforms.

7. Give, from Maine's *Village Communities* and *Ancient Law*, that author's explanation of the origin of feudalism.

8. Explain the Roman terms—*Heres*, *Necessarii Heredes*, *Sui Heredes*.

9. Compare the English with the Roman law of testamentary succession.

10. Compare the English with the Roman law of intestate succession.

11. Give a concise account of the Roman law of servitudes.

12. Explain the terms—*Emphyteusis*; *Cessio in Jure*.

THIRD YEAR STUDENTS.

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No. 1.
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tions.

COMMON LAW.—*Examiner, Professor Molyneux.*

1. What is a *Bottomry bond*? and what are the limits within which its provisions are valid?

2. When the indorsee of a bill of exchange wishes to give time for payment to an acceptor, what precaution is it necessary to take with respect to other parties on the bill?

3. In the case of contracts by an agent, his principal being then undisclosed, state the right and the liability respectively of the latter, the extent to which such right and liability are qualified, the leading rules as to liability of principal when the agent has exceeded the authority given, and any distinction recognised when the principal is resident abroad.

4. What is the difference between simple contract and speciality? State the circumstances essential to the validity of each.

5. How do the rights and liabilities of parties vary in respect of privity of contract and privity of estate?

6. In what respect can a wife contract so as to bind her husband? And under what circumstances does such right cease to exist?

7. Name the several contracts required by the Statute of Frauds to be in writing.

8. Where a grant is on the whole capable of some construction, although the language is ambiguous, in whose favour is such contract to be interpreted? State the reason of the answer.

9. What is an estoppel?

10. State the only instances in which a carrier is not liable for the loss of goods entrusted to him.

11. How does a general lien differ from a special lien?

12. A gentleman is in the habit of sending his servant to a shop to purchase goods on credit. The servant misapplies some of the goods to his own use. Has the seller any remedy against the master on the ground of implied contract?

If such a course of dealing has existed, but upon the last occasion the master has given the servant money to pay for the article then purchased, has the seller any remedy against the master for the value of the last-mentioned article?

13. Is a warranty, made subsequent to a sale, valid? State the reason of your opinion.

JURISPRUDENCE AND CIVIL LAW.—*Examiner, Professor Leslie.*

1. Compare the distinction between *res mancipi* and *res nec mancipi* with that between real and personal property.

2. Compare the English with the Roman law of testamentary succession.

3. Compare the English with the Roman law of intestate succession.

4. Mention the leading changes in Roman law effected by Justinian.

5. (1.) Ought the rights which Blackstone terms Absolute Rights, to be included in the Law of Persons or the Law of Things? (2.) Are these rights provided for, expressly or otherwise, in Roman Law?

6. State the *triplex divisio juris* of Ulpian. Show that the *duplez divisio* was, notwithstanding the passage from Ulpian, followed in the Institutes?

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tions.

7. How do you explain the origin of the distinction between the Law of Persons and the Law of Things, in Roman Law, and the order in which they are placed in the Institutes?
8. State the general law of *abusus*, and the exception in the case of *agri limitati*.
9. Explain the following terms—*Cessio in jure*, *Res dominans*, *Res fungibiles*.
10. Explain the terms *Commodatum*, *Mandatum*.
11. State and criticise the distinction in the Institutes between public and private law.
12. What are, according to Austin, the principal differences between Roman and English Equity? Is his account quite accurate?

SENIOR SCHOLARSHIPS.—MODERN LANGUAGES.

FRENCH.—*Examiner, Professor Meissner.*

I. Translate into French :

Immediately after the conclusion of the peace, the French forces left Scotland, as much to their own satisfaction as to that of the nation. The Scots soon found that the calling to their assistance a people more powerful than themselves, was a dangerous expedient. They beheld with the utmost impatience those who had come to protect the kingdom, taking upon them to command it; and on many occasions they repented the rash invitation which they had given. The peculiar genius of the French nation heightened this disgust, and prepared the Scots to throw off the yoke before they had well begun to feel it. The French were, in that age, what they are at present— one of the most polished nations in Europe. But it is to be observed, in all their expeditions into foreign countries, whether towards the south or north, that their manners have been remarkably incompatible with the manners of every other people. Barbarians are tenants of their own customs, because they want knowledge and taste to discover the reasonableness and propriety of customs which differ from them.—ROBERTSON.

Philological Questions :

1. Mention some of the principal marks of distinction of the three main dialects of the *Langue d'oïl*.
2. Explain the pronouns *ce, cette, celui, leur, maint*.
3. *Blanc, candide; ouest, occident; sud, midi*. Remark on the etymologies of these words.

GERMAN.—*Examiner, Professor Meissner.*

Translate into German :

Charles Lamb was born on the 10th February, 1775, in the Inner Temple, where he spent the first seven years of his life. His parents were in a humble station, but they were endued with sentiments and with manners which might well become the gentlest blood; and fortune, which had denied them wealth, enabled them to bestow on their children some of the happiest intellectual advantages which wealth ever confers. His father, Mr. John Lamb, who came up a little boy from Lincoln,

fortunately both for himself and his master, entered into the service of Mr. Salt, one of the benchers, who, growing old, was enabled to appreciate and reward his devotedness and intelligence, and to whom he became, in the language of his son, "his clerk, his good servant, his friend, his guide, his auditor, treasurer."

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Translate into English :

Unter allen lebendigen Geschöpfen ist der Mensch in seiner natürlichen Beschaffenheit das einzige, das zur Erreichung seiner Zwecke auf den Gebrauch von Werkzeugen angewiesen ist. Die Fähigkeit, sie zu benutzen, beruht nicht allein auf der Intelligenz der Arter, sondern hängt in sehr hohem Maße von der Empfindung und von einer außerordentlichen Feinheit und Sicherheit der Vorstellungsvermögen ab. Liegt ein Stab in unserer Hand, leicht umfaßt, so daß seine Bewegungen einigen Spielraum haben, so drückt er an verschiedenen Stellen die Oberfläche unserer Haut. Jenes schmerzhaft unmittelbare Gefühl, das wir in jedem Augenblicke von der Lage unserer Glieder haben, lehrt uns hienächst, ob diese augenblicklich gedruckten Stellen unserer Hand durch eine gerade oder krumme, durch eine senkrechte oder wagerechte Linie unter einander verbunden werden können; dieselbe Form und Lage schreiben wir dem Stabe zu, der diese Empfindungen verursacht. Gerath der Stab in Bewegung, so wechselt von Moment zu Moment die gedruckten Punkte unserer Haut; für jeden dieser Augenblicke berechnet unsere sinnliche Phantasie die Richtung der Linie, in welcher der Stab vorübergehend liegt, und erzeugt zugleich eine Vorstellung des Punktes, in welchen alle diese Richtungen einander schneiden.—Lorenz.

Translate into Italian :—

The genius of the Roman people, their military education, and the spirit of their laws, concurred in estranging them from commerce and naval affairs. It was the necessity of opposing a formidable rival, not the desire of extending trade, which first prompted them to aim at maritime power. Though they soon perceived that in order to acquire the universal dominion after which they aspired, it was necessary to render themselves masters of the sea, they still considered the naval service as a subordinate station, and reserved for it such citizens as were not of a rank to be admitted into the legions. In the history of the Roman republic, hardly one event occurred that marks attention to navigation any further than as it was instrumental towards conquest. When the Roman valour and discipline had subdued all the maritime states known in the ancient world; when Carthage, Greece, and Egypt had submitted to their power, the Romans did not imbibe the commercial spirit of the conquered nations. Among that people of soldiers, to have applied to trade, would have been deemed a degradation of a Roman citizen.—ROBERTSON.

HISTORY.—*Examiner, Professor Yonge.*

1. Give an account of the principal events in the history of the Long Parliament from its meeting to the breaking out of open war.
2. What were the Petition of Right: the Declaration of Right: and the Bill of Rights.
3. Give an abstract of the arguments of the ministry and of the opposition on the right and policy of imposing taxes on the American colonies.
4. Give some account of four of the following battles: Steenkirk,

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tions.

Malaga, Almanza, Muhlauquet, Fontenoy, Minden, Bunker's Hill, Rodney's victory of Port Royal, the Nile, Toulouse.

5. What were the chief objects of the policy of Cardinal Richelieu.
6. What was the cause of, and what was the principal object aimed at in the Treaties of Partition.
7. Of what character were the relations between the English and French governments at different periods between the years 1660 and 1760.
8. Who were the Encyclopedists; and what was their influence on the subsequent history of their country.

In a brief Essay, examine and compare the careers and characters of Sir Robert Walpole and Lord Chatham.

CHEMISTRY.—*Examiner, Dr. Andrews.*

1. What are the properties which characterise the "critical temperature," and how does this temperature serve to distinguish the gaseous state, properly so called, from the vaporous state?
2. Define what is meant by isomorphous bodies, and state the more important groups of isomorphous elements.
3. Give an account of electrolysis and of its application to the reduction of such metals as potassium and magnesium.
4. How would you analyze feldspar—a compound of silica, alumina, and potash which is not attacked by acids?
5. Calculate the molecular weight of a compound having a vapour density of 2.08 (air=1) and the following composition,

Carbon,	...	40.00
Hydrogen,	...	6.67
Oxygen,	...	53.33

6. Give an account of the paraffine or marsh gas series of hydrocarbons—their artificial formation and the conditions under which they occur ready formed in nature.
7. How is acetylene prepared, and what are its principal properties?
8. What acids are formed by the oxidation of ordinary glycol (ethane alcohol)? State in symbols the reactions.
9. How is mannite prepared from glucose, and what is supposed to be the theoretical relation between these bodies?

[The Candidates were also examined in chemical analysis.]

NATURAL HISTORY.—*Examiner, Dr. Cunningham.*

ZOOLOGY.

1. Give an outline of the classification of Annulida.
2. Describe the structure of the exo-skeleton in a typical Crustacean.
3. Give the names and diagnostic characters of the principal groups of Arachnida.
4. Describe the structure of the mouth in a Dipterous, and in a Coleopterous insect.
5. Mention the more noteworthy peculiarities in the skeleton of a Chelonian.
6. Give a brief account of the digestive system of Aves.

7. State the diagnostic characters and geographical distribution of *Appendix*
Insectivora. *No. 8.*
8. Refer to their orders the following genera of Mammalia:—Phas- *Scholarship*
colomya, Tapirus, Dicotyles, Sciurus, Nasua, Chrysocloris, Hyllobates. *Examinations.*

BOTANY.

1. Describe the structure of an ovule, and give the names and distinguishing characters of the principal modifications.
2. How have the colouring matters of the leaves of plants been grouped by Sorby in accordance with chemical and spectroscopic analysis?
3. Give a brief description of the structure of the epidermis of plants with its appendages.
4. Explain what is meant by the terms di- and trimorphism, and mention instances of the phenomenon.
5. State the characters of the order Primulaceae, and mention the names of the British genera.
6. By what characters are Araliaceae distinguished from Umbelliferae?
7. To what orders do the following genera of well-known plants belong:—Hedera, Stellaria, Fuchsia, Pelargonium, Symphoricarpus.

APPENDIX No. 9.

PRESENTATION to the LIBRARY by the NORTHERN PRESBYTERY of ANTRIM and the PRESBYTERY of ANTRIM.

The Presbytery of Antrim and the Northern Presbytery of Antrim having offered to the authorities of Queen's College, Belfast, the Antrim Library, which is the joint property of the above-named two Presbyteries, subject to the subjoined conditions, the President and Council of Queen's College, Belfast, by a resolution passed on the 9th April, 1873, have agreed to accept this offer on the terms stated in the letter of the Rev. J. Scott Porter, of the 5th of April, 1873, that is to say:—

1. This Library, together with any books that may be specially presented to it hereafter, is to be kept separate and distinct from the books belonging to Queen's College, Belfast.
2. The present ministers of the above-named two Presbyteries, and their successors, being members of one or other of them, shall have the privilege of borrowing books from this particular collection, under such reasonable regulations as may be agreed upon by the College and the two Presbyteries, with a view to prevent or diminish the risk of loss; but the College is not to be accountable for books that may be lent out in conformity with this stipulation.
3. The College authorities will be prepared to execute a deed of trust, if called upon, stating that the Library is held by them subject to the foregoing conditions. In all other respects the Antrim Library is to be available for the use and benefit of Queen's College, Belfast, in the same manner as the books which are its own property.

P. SHULDHAM HENRY, President.

Queen's College, Belfast,
10th February, 1874.

*Appendix,
No. 2.*

*Presentation to the
Library by
the Northern Pres-
bytery of
Antrim and
the Presby-
tery of
Antrim.*

With reference to the second of the foregoing conditions, it has been proposed on behalf of the two Presbyteries above named, that any minister of either Presbytery, borrowing books from the Library, shall give to the Librarian a receipt for the same, specifying the date at which they are to be returned; and if not duly returned at that time, the Librarian is to report the default to the Clerk of the Presbytery to which the borrower belongs. All books are to be taken away and returned at the expense and risk of the borrower.

To this arrangement, and by authority of the College Council, we give our assent, and undertake to have it carried out by the Librarian of the College.

P. SHULDHAM HENRY, D.D., President.

THOMAS ANDREWS, Vice-President.

Queen's College, Belfast,
10th February, 1874.